The Mentor Manual

Compiled by Laura Chappell and

the CORE-IT Virtual Conference Team

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Dedication

This book is dedicated to the IT/cyber industry teachers and instructors and students alike. This is a dynamic industry. Teachers and instructors are natural mentors – the course preparation hours and study are typically invisible to the students. Over the past several years, I have had the honor to meet many community college instructors who approach their positions with dedication and love.

Thank You

Thank you to the many Mentors who responded to our Mentor Survey (January-March 2020). Given the situation going on in the world currently, I thank you so much for taking time out of your busy days to share your stories with the current/next-generation IT/cyber professionals.

About *the Mentor Manual* Edits and Typos

Before you write to me about typos in this book, note that I only ran a cursory dictionary edit on the book. During my original pass at the editing process, I noticed that my edits might change the meaning of sentences. I decided, therefore, to only do simple edit to clean up minor typos. I know Jim Aragon, my book editor, will likely fall on the floor knowing I let this book go out this way, but I think it is best not to edit the content in this case. Sorry, Jim.

The idea for the Mentor Manual came as we were working on the CORE-IT event – a free event for current and future IT/cyber professionals. I'm fortunate to know a lot of very impressive professionals out there and I also know they are a wealth of wisdom. The CORE-IT event seemed like the perfect time to compile some of their thoughts and share them. I'm glad we did.

Enjoy,

Laura Chappell
Chappell University
CORE-IT Host

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Survey Individual Responses

This section of The Mentor Manual offers the individual responses by each Mentor. Again, minimal editing had been done on the answers to ensure we do not alter any meanings.

Please describe your job.	I am the owner of a boutique consulting firm. We offer training for the WCNA for Wireshark Certification and custom classes. We also offer consulting; we come onsite capture the right packets at the right time to solve network and application mysteries. I'm a small business owner, so have to juggle a lot of projects at once.
How long have you been doing this job?	I started as an employee of Network General in 1997 and have been on my own since 2000.
What was your first job in the IT industry?	Running a Novell network in 1992.
What do you think are the three most important skills to have these days when working in the IT industry?	Ability to learn quickly Ability to shift gears midway through a project Ability to listen, not just be thinking of what to say next but really listen
What soft skills do you wish you'd mastered early in your career?	Organization. The number of capture files you have to store grows exponentially as time marches on. Come up with a naming convention and stick to it. I use the customer name in a folder, then where|what|why. Put your notes about the where|what|why into the capture file (Statistics | Capture File Comments), where were you physically capturing (on the host, from a tap, from a SPAN, etc.) what prompted the capture, what are you trying to prove/disprove, what is the trouble ticket #? Any detail you can think of. As you make filters, use the filename stem then underscore what were you filtering and what were you trying to achieve. This will save time when you go back to look for things, trust me. Treat your paperwork and receipts the same way. Tax time comes no matter what project you are working on. Be ready.
Describe your working style.	Changes every project, but I do research and learning in the beginning, then focus in on what I can do to get the deliverable done.
How do you deal with difficult clients?	I once had to sit in a customer's office and refuse to leave until I got paid. It got ugly, but I got my check. Don't be afraid to stand up for yourself but try to not let it get that far. Usually customers become difficult when they are stressed, someone is probably breathing down their neck over the outage. Look at it from their perspective. Ask "what can we do to get this solved?"
What project has been your favorite in your career?	Every single consulting gig where I get to say, "well there's your problem right there". It is still a tremendous rush.
How do you deal with stress?	All the common vices.
Can you describe a time you failed and how you moved on?	We all fail. Talk to someone further in your desired career that you respect and ask how they would have handled it. My Dad used to say that you only fail when you stop trying. It's true, but it doesn't me you have to keep trying the same thing. Test and tweak, it works in networking and in life.

If you could go back in time to when you started in this industry, what advice would you give yourself?	Run! Seriously, I love what I do but I wish packet analysis was not such a niche. Think about the growth possibilities in the field. Use the number of certification holders as a guide. Figure a way to merge what you love with what there is a need for - you'll be happier in your career.
Submitting Mentor:	*Betty DuBois* *Chief Detective* *Packet Detectives*

Please describe your job.	IT generalist
How long have you been doing this job?	25 years
What was your first job in the IT industry?	desktop support
What do you think are the three most important skills to have these days when working in the IT industry?	being able to communicate IT needs to management if you can, focus on a few core skills always learn, don't stop
What soft skills do you wish you'd mastered early in your career?	how to motivate others to change
Describe your working style.	I try to teach others why we do things and not tell them do it this way
How do you deal with difficult clients?	Being as patient as I can. Even when people just don't want to learn
What project has been your favorite in your career?	Installing a new IDS system
How do you deal with stress?	I unplug from technology for a time. Even if it is only a few hours.
Can you describe a time you failed and how you moved on?	I installed a pre-release patch and brought the network down for a day and 1/2. I was fortunate I didn't lose my job. Now I read as much as I can about each patch I install.
If you could go back in time to when you started in this industry, what advice would you give yourself?	focus on a few things, don't try to be a generalist.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	This is an exciting time in our industry. If you like to learn, you are in the right place. Be comfortable teaching others, you will have many more opportunities available to you. Don't think you have to have all the answers, there is usually someone smarter in the room. Be comfortable in praising others on your team.
Submitting Mentor:	***Bernie Fish*** ***IT Director*** ***Brook Weiner***

Please describe your job.	Network engineer
How long have you been doing this job?	5 years
What was your first job in the IT industry?	Service desk support
What do you think are the three most important skills to have these days when working in the IT industry?	technical understanding about allot of technologies. These days it is important to understand that your job isn't your job anymore, but you have to do it with multiple teams and players. Troubleshooting skills: understand that the solution is sometimes only the solution for the incident and not for the problem. Learn to adapt. Moving on is important in the changing technology.
What soft skills do you wish you'd mastered early in your career?	Learning politics. The OSI Model is 7 layers but there are 2 more 8: Users 9: Politics
Describe your working style.	When an incident is reported I like to talk again to the people who reported it. These days there are allot of channels and not all the information is getting in the right way to the one who is trying to fix the problem. Sometimes you read all the information and think "Oh let's try this because it sounds like this will fix it" but after talking to the client you think "Owh did they meant that. Then I have to try this"
How do you deal with difficult clients?	When I have a difficult client, I try to keep in mind that it isn't personal. They have a problem with IT and not with me. (yet ;)) Sometimes you have to let them rage on and when they unleashed all the steam you can begin fixing the problem. "I understand your problem and I would like to see how we can fix this."
What project has been your favorite in your career?	The best projects are the one you want to start to fix your work. Implementing a monitoring solution was the best project because I learned so much about keeping control of the devices.
How do you deal with stress?	sit back and take a (small) coffee break. Then I can focus on how to get rid of the stress.
Can you describe a time you failed and how you moved on?	remember the old 3com switches? The one where you CAN'T use the last 2 ports because they are shared with the uplinks? First time I patched that interface the switch came unresponsive and allot of people couldn't work anymore... Sorry. But if people work, they WILL make mistakes. It only matters to don't make the mistake again and take your responsibility.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Start earlier with study. I have to keep up against engineers that are working for 20 years in the IT and that means they have a lot more experience. But my time will come.

Please share any final thoughts or advice with your peers or up-and-coming technologists.	Have fun with the conference. Enjoy all the information and thanks all for hosting it.
Submitting Mentor:	*Mike*
	Network Engineer
	Hospital in the Netherlands

Please describe your job.	Virtual infrastructure deployment and administration
How long have you been doing this job?	twenty years
What was your first job in the IT industry?	Programmer Analyst
What do you think are the three most important skills to have these days when working in the IT industry?	Good writing and communication skills
	A cool head in a crisis
	A passion for the technology and an intense desire to stay current
What soft skills do you wish you'd mastered early in your career?	Good people management skills. Good sales/presentation skills.
Describe your working style.	Collegial
How do you deal with difficult clients?	Gently but firmly
What project has been your favorite in your career?	Setting up DR centers and co-location sites. Supporting radiological imaging applications.
How do you deal with stress?	Deep breathing and remembering that work is not important, only family.
Can you describe a time you failed and how you moved on?	There are many times I have failed to realize my goals. I step back, re-assess, find a new path, and try my best not to dwell on it. My learn from our mistakes and we build on our successes.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Stay current. Stay open to new technology, keep looking for the next wave. Don't allow yourself to be pigeonholed.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Get as many certifications as you can as early as you can. Stay current with the most important. Keep learning.
Submitting Mentor:	*George M Adamo*
	Senior Technology Consultant
	TBL Associates

Please describe your job.	Network Architect
How long have you been doing this job?	+/- 20 years
What was your first job in the IT industry?	Technician. I installed and repaired modems and multiplexers.
What do you think are the three most important skills to have these days when working in the IT industry?	Networking: switching and routing. Network and endpoint security. Cloud architecture and cloud security.
What soft skills do you wish you'd mastered early in your career?	Programming skills related to TCP/IP. Scripting
Describe your working style.	I work as network architect and also as network & security responsible.
How do you deal with difficult clients?	I do not deal directly with clients, so this is not applicable in my job.
What project has been your favorite in your career?	Implementation of Palo Alto firewalls.
How do you deal with stress?	Time pressure reasonably well. Having a project working without making fundamental errors can be stressful.
Can you describe a time you failed and how you moved on?	Implementing new multi-layer switches in a data center and see at the end that some things did not work. I moved on with first taking logs, dumps etc. followed with rolling back to the old situation and see with the implementer how to solve the issues.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Try to work out an ambitious and well-structured learning plan in order to get certified in networking and security.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Try to get informed about your profession as much as possible. Internet is a good source. - Follow courses. - Go to trade fairs.
Submitting Mentor:	*Raphael Bytebier* *Network Architect* *Samsonite Europe N.V.*

Please describe your job.	IT General
How long have you been doing this job?	6 Years
What was your first job in the IT industry?	Virus Repair Shop
What do you think are the three most important skills to have these days when working in the IT industry?	The ability to want to go farther or find out how something works Solid foundation Open mind
What soft skills do you wish you'd mastered early in your career?	Ways to better understand your audience in their actions.
Describe your working style.	Normal IT at a hospital
How do you deal with difficult clients?	Try to make the situation best by giving them different ideas on the situation.
What project has been your favorite in your career?	Setting up a threat hunting landscape.
How do you deal with stress?	Fly quads after work!!!
Can you describe a time you failed and how you moved on?	We got it easy were we are at it is almost impossible to fail.
If you could go back in time to when you started in this industry, what advice would you give yourself?	I did not think Linux was a big deal. It is pay attention to it also try to pick up a programing language.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Always have an open mind. Don't put yourself in the field if you think you can go to school for 2 years then not pick up a book after it. Be honest about your capabilities, don't say you know how to troubleshoot items when you never touched them before. Get a solid foundation on networking and the way computers work.
Submitting Mentor:	*IS Tech*

Please describe your job.	Network & Security Consultant
How long have you been doing this job?	38 years background in networking and 24 years background in security.
What was your first job in the IT industry?	Setting up 4Mbps Token Ring & 10Mbps 10Base-5 or 10Base-2 networks connected to either Sun Microsystems Unix, DEC Vax servers, IBM S/36 or S/38 mainframes, OS/2 or Novell Netware 286 servers.
What do you think are the three most important skills to have these days when working in the IT industry?	Know thy packets. It took numerous years to gather the experience I have today, but I would do it all over again if I had to.

Baselining... unless you have a baseline of something operating properly, it's really hard to pinpoint where problems might be.

Never give up... regardless of how impossible it may seem. My worst nightmare problem took 3 months to figure out! But it was well worth it. |
What soft skills do you wish you'd mastered early in your career?	I spent more time on the bleeding edge of technology so that I could surpass others, I forgot about acquiring managing skills and because a lone wolf sort of super trouble shooter. But I wish I would have gathered a bit more managing skill. I did master speaking in front of large crowds (600 people) early on in life and I'm glad I did.
Describe your working style.	Leisurely... work at "my pace" style. I also strive to find something that should be done but which nobody has yet to do and then either do it myself, or talk to those who can do it if it's outside of my scope of work and follow through to see that they do it. All companies need improvement somewhere. Look for it, find it and run with it. In the end, you'll be making your own work and not be handed somebody else's work! And I like it that way!!!
How do you deal with difficult clients?	Objectively, cautiously, but openly and frank. I've found that sincere honesty helps get one through the difficult times. Just be careful of what you say and how you say it so as not to piss the customer off.
What project has been your favorite in your career?	I would say my 2011 work with the Ministry of Education in Japan to set up the world's fastest supercomputer "The K Computer" (made by Fujitsu) in their RIKEN (Physics and chemistry Laboratory) in Kobe Japan. 32Tbps back in 2011!!! Think about that number for a minute! You can do a low lever format of 1.5 Petabytes of disk space in less than 10 minutes! The write speed of that supercomputer was faster than their read speed because writing is sequential whereas reading is random! It was totally the best project of my life!
How do you deal with stress?	Analyze packets... LOL... but serious... that's how I alleviate my stress. There are always new protocols coming out and if there's one I'm not familiar with, I download the RFC, read it, find a sample capture .pcap file and start learning about every single bit of that new protocol. It keeps me from getting stressed while I'm doing something I like!
Can you describe a time you failed and how you moved on?	I cannot really say that I've failed myself. One company failed me, and all the rest of the employees and it went under 2.5 years after I left. Actually, I wanted to leave it 1.5 years earlier but because I was the main lead... it was hard to pull out then. I immediately found a new job and have been doing fine ever after.

If you could go back in time to when you started in this industry, what advice would you give yourself?	Forget about application programming and server installation. The programming languages change all the time requiring you to learn something new each time. The OS's also change all the time requiring you to learn something new each time. But the TCP/IP I used back in 1986 is still being used today... with quite a few new additions and modifications, but the basics are still the same as back in 1986!
Please share any final thoughts or advice with your peers or up-and-coming technologists.	RPA, AI and web-based services seems to be the wave of the future. But AI is probably the most misunderstood technology around. The AI instructor must instruct the computer properly from the get-go or else it won't do what you want it to do. Repetitive tasks like teaching robots to do the same thing over and over in a factory is easy. But trying to teach a computer to think on its own and come up with a reliable and safe response can take upwards of 8 months to over 3 years... and that's if done properly. If you teach it wrong from the get to... then you go back to square one and repeat the next 8 months to 3 years hopefully teaching it the right way this time.
Submitting Mentor:	*wbenton*
	Network Security Consultant
	Information Development Co. Ltd

Please describe your job.	IT security
How long have you been doing this job?	28
What was your first job in the IT industry?	developer
What do you think are the three most important skills to have these days when working in the IT industry?	Cybersecurity
	innovation
	learning
Describe your working style.	serious
How do you deal with difficult clients?	cooling attitude
What project has been your favorite in your career?	cybersecurity
How do you deal with stress?	cool
If you could go back in time to when you started in this industry, what advice would you give yourself?	more learning
Submitting Mentor:	*Bris*
	IT security

Please describe your job.	I create cyber security contests for K-14 and I teach college cyber security classes.
How long have you been doing this job?	I have been doing these things for about 6 years
What was your first job in the IT industry?	My first job was IT help desk; doing the simple things like fixing printers, log in problems, Wi-Fi, eventually moving up to basic server management.
What do you think are the three most important skills to have these days when working in the IT industry?	Always willing to learn new technology! Public Speaking Technical Writing
What soft skills do you wish you'd mastered early in your career?	I wish I had quickly mastered Public Speaking and Technical Writing. Employers and supervisors aren't always tech savvy, which means you need to have the skills to talk and write "in English" to them.
Describe your working style.	I work in teams to get tasks done. Working collaboratively with a goal or vision allows ideas to spring up and gets everyone deeply involved in positive ways that make the goal/vision achievable and better than you expected.
How do you deal with difficult clients?	Take a deep breath, have patience, and ask questions that will aid you in understanding the issue they have and come up with a resolution.
What project has been your favorite in your career?	My favorite projects have been creating regional competitions. I come up with a vision for a contest, my team works together to plan the day, the technical portion and then see our vision come to life. It is a great experience every time.
How do you deal with stress?	Having a hobby helps (mine is music). Taking time off and taking care of yourself are also ways I deal with stress.
Can you describe a time you failed and how you moved on?	Failure is part of learning. In my line of work, my experiments tend to fail more often than not. At first it can seem overwhelming to fail, but you have to think of it not as a scoreboard, but more as a learning experience. Take the scientific method and try again from a different angle; take some time to walk around and come back with a fresh mind, do something completely different like washing dishes, sleep on it if you can. The inspiration for success will come!
If you could go back in time to when you started in this industry, what advice would you give yourself?	Finish your degree on time, get certified, dream bigger and don't give up!
Please share any final thoughts or advice with your peers or up-and-coming technologists.	We have an important role in the world. Physical security and Digital security are one and the same. It is up to us to ensure our organizations, communities and families are safe in the digital world like the physical world. Together, we can make a positive difference in the world.
Submitting Mentor:	*Irvin Lemus, CISSP* *Regional Coordinator*

Please describe your job.	I administer network monitoring systems used in the NOC of a rural cellular provider.
How long have you been doing this job?	Five years. Before that, 20 years as a **nix system admin.
What was your first job in the IT industry?	I started as a DEC VAX system manager in the avionics labs for the C-17 transport. I completed a programming certificate at Control Data Institute to get into IT.
What do you think are the three most important skills to have these days when working in the IT industry?	Customer service - know how to talk to users to help them with a problem
	Troubleshooting - know how your system works and how to analyze its problems
	Communications - know how to collect information from and pass it on to other people
Describe your working style.	Flexible, supportive, linear. I may be working on a configuration when I have to stop to work on a user's problem. I don't resent it when I have to stop working on one thing to help a user, because I know their work depends on the systems I support. I'm logical and go from step A to step B to step C to ...
How do you deal with difficult clients?	Stay patient, don't make it personal, and listen to what they say. Think through what they tell me so I can get to the heart of the issue and deal with that. Be up front and tell them whether it's something that I can resolve or not.
What project has been your favorite in your career?	Supporting the ground control system for the Boeing/ULA Delta IV rocket. Great people to work with, interesting work (Rocket launch!), and a satisfying result from the work (Successful rocket launch!)
How do you deal with stress?	I try to maintain the perspective that the work is not as important as other things in my life. Look at the big picture - world, universe, God - and anything that happens on the job is small potatoes.
Can you describe a time you failed and how you moved on?	An HP UNIX cluster had an FDDI interface to an Ethernet switch. I decided to change the FDDI interface MTU to 1500 so the switch wouldn't have to split the FDDI packets. When I made the change, the whole cluster died, and 75 developers lost access to their work. When the first ones started banging on the server room door, I told them I was bringing the cluster back up, not telling them I was the one that brought it down. Later I told my boss what really happened, and he just told me not to do that again. It taught me to do more planning and research before making changes to a system.
If you could go back in time to when you started in this industry, what advice would you give yourself?	My IT career has been a jack-of-all-trades, master of none kind of thing. I would concentrate on one area I was really interested in and become an expert in that.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	I got into IT because I needed a better paying job. After 30 years, I can't wait to retire. Find something you enjoy doing and go for it. You'll still work hard, but you'll be a lot happier every day. If that's IT, then it can be a great career.
Submitting Mentor:	*Dave D*
	Network Monitoring System Analyst

Please describe your job.	Networking Manager
How long have you been doing this job?	more than 25 years
What was your first job in the IT industry?	CADD coordinator
What do you think are the three most important skills to have these days when working in the IT industry?	Networking as a Service
	Cloud Integration
	Application visibility
What soft skills do you wish you'd mastered early in your career?	Problem-Solving, Creativity, Work Ethic, Interpersonal Skills, Time Management, Communication, Adaptability
Describe your working style.	Logical, analytical, planned, integrative, and ideation-oriented
How do you deal with difficult clients?	Stay calm, listen to their concerns, deliver a prompt reply, offer a solution, cut your losses, Review and learn
What project has been your favorite in your career?	Networking, security, Cloud computing, Cloud Networking, Omnichannel, ERP
How do you deal with stress?	Track your stressors, develop healthy responses, establish boundaries, take time to recharge, learn how to relax
Can you describe a time you failed and how you moved on?	talk about a real failure you've had, starting by describing the situation, take responsibility and don't make excuses for the failure, show what you learned from the experience,
If you could go back in time to when you started in this industry, what advice would you give yourself?	Strategy Planning
Please share any final thoughts or advice with your peers or up-and-coming technologists.	The Operational Trends, Sourcing Trends, access, visibility what additional point for discuss?
Submitting Mentor:	*Alex Hayes*
	Networking Manager
	Liverpool

Please describe your job.	As the CEO of a WiFi Analytics company, I oversee that customers are happy with our solution and that the product is progressing to help customers now and in the future.
How long have you been doing this job?	8 years
What was your first job in the IT industry?	IT Technical support for a smaller company. PC Setup, pulling cables, doing backups, configuring servers, and helping a staff of about 100 with everything from mouse issues to software support.
What do you think are the three most important skills to have these days when working in the IT industry?	Ability to learn and adapt to new technologies Good communication skills An ability to work with both on premise and cloud-based infrastructure
What soft skills do you wish you'd mastered early in your career?	The ability to explain to non-technical coworkers why a technical problem really needs to be solved now instead of later in terms they can relate to.
Describe your working style.	Paced
How do you deal with difficult clients?	I like to be upfront as much as possible with both good and bad issues. I have found most clients don't want surprises, and as much as I can mentally prepare them for any downtime, disruptions, etc. if it happens, they knew it was a possibility, and aren't as concerned.
What project has been your favorite in your career?	Building an on premise, bare metal, load balanced web server and partitioned db server back end solution to help a company scale.
How do you deal with stress?	Exercise
Can you describe a time you failed and how you moved on?	Way too many to pick from. I've found the best way for me to move on is just to keep going. If I just keep going, there will be a new challenge or opportunity soon enough that I'm engrossed in, and I'll forget about how I messed up something the last time.
If you could go back in time to when you started in this industry, what advice would you give yourself?	I'd tell myself to enjoy being in the position that I'm in, because it won't last long. Going up the career path, things don't seem to get better or worse, just different. More pay usually comes with more hours and more responsibility. Enjoy whatever it is that you're working on currently.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Despite the changes in the industry, fundamental knowledge and understanding such as TCP/IP, packets, subnets, processors, memory allocation, disk speeds, cryptography, wireless, security and isolation, still go a long way. And issues related to these concepts seem to come up over and over again in new forms. Tinker. Have fun. Learn. The world isn't getting less technical.
Submitting Mentor:	*John Kerber* *CEO* *WhoFi*

Please describe your job.	Pre-Sales Solutions Architect
How long have you been doing this job?	20+ years
What was your first job in the IT industry?	Fix and repair at IBM
What do you think are the three most important skills to have these days when working in the IT industry?	Security, prevention, detection and white hat
	Scripting in different languages
	Infrastructure knowledge (what is in the Data Center and outside the data center)
What soft skills do you wish you'd mastered early in your career?	Usage of currently available tools, identifying new threats. How the tools are used by those trying to hack into a network.
Describe your working style.	Hands on
How do you deal with difficult clients?	Hear what they have to say, let them get it off their chest, acknowledge that you share their concerns and ask what they would like to do next and let's move forward
What project has been your favorite in your career?	Had a software application that had network issues and I was able to configure it and make it work when others said it couldn't be done
How do you deal with stress?	Stop take a deep breath, stand up stretch a little and relax, somethings you just have to work through
Can you describe a time you failed and how you moved on?	Had an application that could not do what the customer asked, tried to fix a work around to meet the customers satisfaction but that couldn't be done. I just had to explain to the customer what he was asking of the product it was not meant to do and there was nothing that could be done. Just had to be honest with him let him know we tried everything we could do and move to the next project
If you could go back in time to when you started in this industry, what advice would you give yourself?	Learn programming
Please share any final thoughts or advice with your peers or up-and-coming technologists.	I am looking forward to better understand what is currently taking place in the world that are threats how to deal with them, how to use existing tools and learn about new tools and use them correctly. Also brush up on current skills
Submitting Mentor:	*Geoff Rennie*
	Master Pre-Sales Solutions Architect
	Micro Focus

Please describe your job.	I'm an IT Compliance guy taking care of the ISMS (information security management system) at our company
How long have you been doing this job?	IT Compliance: 7 months, IT Security: about 2 years, IT in general: almost 20 years
What was your first job in the IT industry?	My first job was being a system administrator for good old Sun Solaris machines
What do you think are the three most important skills to have these days when working in the IT industry?	Constant thirst to learn something new Good analytical skills Soft skills (as most problems are not caused by machines but by people)
What soft skills do you wish you'd mastered early in your career?	Leadership! During my first job interview I was asked "do you want to lead sometime in the future?", I denied at this point of time, a big mistake.
Describe your working style.	It's a good mix between "hands-on" and "follow the guidelines". IT is not always just binary, and the real truth lies somewhere in between
How do you deal with difficult clients?	No client is difficult, different people are having different problems. It's vital to understand that everybody has some reason to behave the way he does. To understand this fact can help to overcome some obstacles already at the beginning of a discussion
What project has been your favorite in your career?	The migration of an old host system which was only possible between Christmas Eve and Boxing Day to keep operations up and running. We felt like heroes as we finished everything in time
How do you deal with stress?	Stress will always be present. Just make sure it doesn't stay too high for a given amount of time. Playing with the kids at home helps to focus on the things which are really counting in your life
Can you describe a time you failed and how you moved on?	At some point of time you'll realize that making mistakes is just human. We are no robots! Just make sure you are learning from your mistakes and using that knowledge to do it better next time
If you could go back in time to when you started in this industry, what advice would you give yourself?	Be braver!
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Focus on your strengths and your interests. There will always be some days when work is just "work". But if there are some days when there are no clear borders between hobby and job anymore, you'll discover your motivation and your productivity will raise enormously.
Submitting Mentor:	**Ben K.** **Information Security Specialist**

Please describe your job.	Support engineer networking and security
How long have you been doing this job?	21 years
What was your first job in the IT industry?	Engineer (but also networking)
What do you think are the three most important skills to have these days when working in the IT industry?	Curiosity Adaptability The ability to plan you own career
What soft skills do you wish you'd mastered early in your career?	People management. Understanding large corporations
Describe your working style.	Troubleshooting from the hip.
How do you deal with difficult clients?	Find a shovel big enough to work handle the shit. (Farm boy humour)
What project has been your favorite in your career?	Building a SOC infrastructure for the Dutch government.
How do you deal with stress?	Enjoy the bang of work dropping of your desk on the floor because your desk is full. If it happens you might as well enjoy it.
Can you describe a time you failed and how you moved on?	I used to have problem making decisions, so I tended to delay them. The biggest wisdom was when I learned that not making a decision is also a decision.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Whatever you decide. If it's the best option at that moment, then it will be the best option.
Submitting Mentor:	*Hugo van der Kooij* *Support Engineer* *KPN Security*

Please describe your job.	I do incident response and forensics. Can't go into more detail...sorry.
How long have you been doing this job?	2 years+ out of a 30+ year old career.
What was your first job in the IT industry?	An all-around network engineer/server administrator/client guy in a manufacturing plant for a large agribusiness company.
What do you think are the three most important skills to have these days when working in the IT industry?	Passion for the industry and technology. You have to be hungry and continue to always learn or you will get left behind.
	Network, network, network. If you don't know how to do something, you need to have a pool of smart people to reach out to. We can't know it all.
	Don't forget work/life balance. It shouldn't be 100% tech.
What soft skills do you wish you'd mastered early in your career?	How to listen. Sometimes in IT we can feel like we know it all, and we forget who our customer is. Listening to their concerns, issues, advice, feedback, whatever is hugely important. Added to the above, how to communicate. A lot of IT folks don't know how to carry on a conversation with someone. There are books written on the subject, but communication is huge! *****Also, make yourself dispensable. You will never grow in your profession if you squirrel away information because nobody will want to move you out of that spot. Document, document, make sure everybody knows your job and then when opportunities come up, they aren't afraid to promote you or put you on cool projects.
Describe your working style.	I like to get in at least 1-1.5 hours earlier than anybody else to ease into work. It gives me time to get going, get caught up on email, and in short start the day. I always take 15-20 minutes at night before I go to bed and write down how the day went.... what did I learn that day?
How do you deal with difficult clients?	It gets back to the soft skills. Most non-technical people view technology as a tool. If the tool stops working, they can't do their job. Understand where they're coming from and its smooth as melted butter. In short, empathize.
What project has been your favorite in your career?	I converted a legacy system running a bunch of old Unix systems into something manageable. Unfortunately, due to an NDA I can't go into more detail.
How do you deal with stress?	Meditation and I have 2 dogs.
Can you describe a time you failed and how you moved on?	I actually got fired from a job by a narcissist boss. Luckily, I'm good at what I do, and I was networked. My reputation spoke for itself, I remained calm, and it ended up all being for the good.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Work hard but work smart.
Submitting Mentor:	*J Murri*
	Data Analyst

Please describe your job.	Technical writer and illustrator
How long have you been doing this job?	Close to 10 years
What was your first job in the IT industry?	Sales Manager for Network General
What do you think are the three most important skills to have these days when working in the IT industry?	Good general knowledge of network structure
	Good general knowledge of the various tools used to manage networks
	Good general knowledge of the various tools used to maintain a network
What soft skills do you wish you'd mastered early in your career?	I picked up most of my technical training while I was in the military. When I began taking college courses, I focused on taking classes from the Bachelor of Arts curriculum. I took classes in English, Social Studies, Math, Communications and Speech. So, the military had helped me with my technical skills and college had rounded me out so I could communicate effectively. Had I stayed in school I could have saved time achieving my goals. And, the college degree would have raised my ability to attain higher position in a company. It was my experience that most companies do not offer Director or Vice President to people that do not have a degree.
Describe your working style.	I have never considered that I have a work style. I generally adjust how I work with clients by how I perceive what they expect from me.
How do you deal with difficult clients?	I try to get them to tell me as completely as possible what they are shopping for or what problem they are trying to fix. I have found through the years, if I treat my clients with respect, they treat me with respect.
What project has been your favorite in your career?	My time with Network General. I liked everything about it. The people, the product and the perks.
How do you deal with stress?	I don't do well with stress, so I try to work in a way so I can avoid stress.
Can you describe a time you failed and how you moved on?	I was fired once in my life. But my next job was much better than the one that I left. I don't even remember the name of the company that let me go.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Finish school!
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Preparing for your future should not be taken lightly. It requires a lot of serious thought and planning. Don't go looking for short cuts, there aren't any
Submitting Mentor:	*George Bouchard*
	Technical Writer
	Self Employed

Please describe your job.	Engineer, Network Technologist, Technical Writer
How long have you been doing this job?	55+ years
What was your first job in the IT industry?	Research Engineer
What do you think are the three most important skills to have these days when working in the IT industry?	Listening skills Always inquisitive never stop learning
What soft skills do you wish you'd mastered early in your career?	learn to write descriptively, keep good records, always keep learning and questioning, Make good technical friends… like Laura
Describe your working style.	Dedicated, focused, but casual and always helping others
How do you deal with difficult clients?	Teach Them and be patient! They are usually difficult because they are in an area that they do not understand. Lack of knowledge leads to fear, fear leads to anger. Become a friend that is helping them learn and overcome anger and being difficult!
What project has been your favorite in your career?	Defining needed technology, Designing and help build some of the world's best network test equipment!
How do you deal with stress?	My stress is usually caused by not understanding stuff, so I really dive in and read to learn! Also dealing with people that are internal politicians and usually includes narcissistic behavior and lying to hurt others.
Can you describe a time you failed and how you moved on?	As an Electrical Engineer and tool designer failure is part of success. No one ever built or designed anything that worked 100% on completion. So, failure is a function of learning. I have experience failure many times where something I designed or planned failed, I learned from it and improved my approach and always asked for help from my technical friends. The Chinese say that falling is not failure it is NOT in getting up and carrying on! This is where your real friends will come and help!
If you could go back in time to when you started in this industry, what advice would you give yourself?	Do Not sweat the small stuff! When you are a young Engineer you believe that you can never fail. When the first time you hit a wall or have a failure it is scary, many just quit but good engineers and managers get up and try again and again. Zig Ziglar said "You can have everything in life you want, if you will just help other people get what they want." We all want success and acceptance - working together we can all succeed!

Please share any final thoughts or advice with your peers or up-and-coming technologists.	"If people like you, they'll listen to you, but if they trust you, they'll do business with you." (Zig Ziglar) -We may be in the network business but remember we are always in the people business! -Learn to research and read, always be learning and always be encouraging to those around you. -Always move forward and try to avoid the unmotivated and overly motivated people. I am in my 70's and I still read hundreds of pages monthly and I still reach out to my technical friends and discuss the latest attack, fix, standard...etc. -Embrace every difficulty or problem as a learning step! -Take time to learn about the tools you use, test them and learn their limits. -In networking sometimes just unplugging the system will solve your problems, at least until you plug back in.
Submitting Mentor:	*Tim "The Oldcommguy" O'Neill* *Chief Investigator and Technical Editor* *B.T. Solutions (www.NetworkDataPedia.com)*

Please describe your job.	I perform network forensics investigations in incident response situations as well as doing network security design/architecture/enhancement projects and general consulting related to CyberSecurity. I built Security Operation Centers for various customers (with up to 120k+ employees) and trained their security analysts.
How long have you been doing this job?	15 years
What was your first job in the IT industry?	I started in computer game Q&A, which is a lot less exciting than it may sound :-)
What do you think are the three most important skills to have these days when working in the IT industry?	Open minded communication skills Broad knowledge about how IT and the rest of the business work together specialty area skills, e.g. network forensics
Describe your working style.	I prefer gaining hands-on experience to reading books before starting. I try and test and experiment and read up specific things if I don't understand what's happening.
How do you deal with difficult clients?	Listen carefully, ask questions when things are unclear, try to understand their pain points and adapt my approach so that the outcome is acceptable for all parties involved.
What project has been your favorite in your career?	Any project where I was able to help a customer in a critical situation, usually in incident response. These often require working a lot of overtime hours, but you can tell that you're making a difference.
How do you deal with stress?	I make sure I have enough "personal time off" and turn off my business cellphone and do not read emails. And if a project turns stressful it helps to get enough sleep. Worst case: headphones and good music :-)
Can you describe a time you failed and how you moved on?	I sent a gold master CD for a computer game to the duplication factory that was missing a critical piece of software, resulting in 10.000 CDs that didn't work. I moved on by admitting it's my fault, not trying to hide my mistake which turned out to be the right option.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Learn how Microsoft Active Directory works, because it's really important knowledge in almost any security incident. Most attackers will try to gain Domain Admin rights and it's really helpful knowing how AD works and how to protect it.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Stay curious, and experiment with technology as much as you can. Don't try to gain knowledge by asking others about everything without having invested in the basics yourself first. Mentors are often willing to help if they can tell that you got stuck after trying to find out yourself, but they won't if it seems that you're trying to take the easy way without putting in the work first.
Submitting Mentor:	*Jasper Bongertz* *Principal Network Security Specialist* *G DATA Advanced Analytics GmbH*

Please describe your job.	Develop and implement effective IT strategies that complied with organizational and legal standards, supporting current IT strategies. Act as a focal point to align IT and business through strategic initiatives. Enable coordination across all organizational assets, proactively supporting multiple projects. Utilize high-level IT and software test engineering skills.
How long have you been doing this job?	11 Years
What was your first job in the IT industry?	Computer instructor and programmer
What do you think are the three most important skills to have these days when working in the IT industry?	Data Analysis Information Security Cloud Operations
What soft skills do you wish you'd mastered early in your career?	Creativity, Communication, and Teamwork
Describe your working style.	Creativity, Communication, and Teamwork
How do you deal with difficult clients?	Tried as much as possible to reach a consensus plan of action and a mutual business process
What project has been your favorite in your career?	The implementation of new core banking software and enterprise network deployment in over 400 locations or business units for the biggest Microfinance bank in Sub-Sahara Africa.
How do you deal with stress?	Sometimes do a solo walk, watch movies, or engage in political discussions
Can you describe a time you failed and how you moved on?	After three weeks of go-live of a new core banking system, the process was stopped by the Bank's management as a result of slow connectivity. I have to re-engineer the entire process, change the network deployment framework, engaged consultants and conduct more training. We have to re-implement the data migration process and successfully go-live again after 18 months.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Consistency is very crucial in career growth. Try to identify a mentor and discuss issues for career growth.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	The world is projecting towards data science, artificial intelligence, machine learning, cloud computing, and smart workplace. Research or career growth plans should focus on these directions so as to build a futuristic career engagement.
Submitting Mentor:	*Dr. Adeghe, John* *IT & Project Management Consultant* *BeeJAO Infosolutions Limited*

Please describe your job.	Chief Forensic Officer (CFO)
How long have you been doing this job?	15 years
What was your first job in the IT industry?	Field Engineer for Computer Manufacturer
What do you think are the three most important skills to have these days when working in the IT industry?	Ability to improvise
	Ability to think/act like a crook/hacker
	Ability to approach a problem with an insatiable amount of curiosity
What soft skills do you wish you'd mastered early in your career?	Legal degree Financial analysis / cash flow / domestic and international regulations
Describe your working style.	Laid back...
How do you deal with difficult clients?	I don't -- I let them be someone else's problem.
What project has been your favorite in your career?	Taking a series of patents, I had granted (that relate to Cyber Security / Virus analysis) and bringing same to market.
How do you deal with stress?	Couple hours on a combat firing range with a 50-cal. rifle
Can you describe a time you failed and how you moved on?	Not really. Every project I've been involved in has always had several backup plans ready to execute, so there were no failures per se.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Never trust a Human Resources staff member. They cannot keep a secret and will almost always leak out info on a current cyber investigation to the person of interest.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Always assume that the bad guy is a lot SMARTER than you, especially when dealing with new technology.
Submitting Mentor:	*Bill Spernow*
	Chief Forensic Officer
	Security Mentors, LLC

Please describe your job.	Criminal Investigation Sheriff's Office
How long have you been doing this job?	20 yrs
What was your first job in the IT industry?	Finding kiddy porn and decryption
What do you think are the three most important skills to have these days when working in the IT industry?	Understanding the criminals on the net
	Security and or protection of data
	How to catch data thief in a breach
What soft skills do you wish you'd mastered early in your career?	Programming
Describe your working style.	Google is my friend!
How do you deal with difficult clients?	In my career, put them in jail
What project has been your favorite in your career?	Forensics on a computer that exonerated, when one wanted so bad to fire 2.
How do you deal with stress?	Shoot, build custom PC, work harder on python programming, and make wife mad.
Can you describe a time you failed and how you moved on?	My failures are with getting admin to understand why we need to spend on more than one program for the same job, as a mechanic has more than one wrench.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Study python and learn python
Please share any final thoughts or advice with your peers or up-and-coming technologists.	There is no such thing as a problem, only solutions. Many will always find problems, only a few can focus on a solution.
Submitting Mentor:	*Emory C Mullis*
	Investigator
	Coweta County Sheriff's Office

Please describe your job.	Cyber Forensics Examiner
How long have you been doing this job?	10 years
What was your first job in the IT industry?	Digital Forensics Investigator
What do you think are the three most important skills to have these days when working in the IT industry?	Networking knowledge
	Cyber tool configuration and monitoring
	Working knowledge of multiple OS families
What soft skills do you wish you'd mastered early in your career?	Collaboration (in an atmosphere where people are held responsible for their performance). A team is more effective than an individual, but a team dragging dead weight that is rewarded for being dead weight is a burden.
Describe your working style.	While I can work as an effective team member, I am also comfortable working alone and planning my approaches and analyses. I do not like my time wasted, so I do not waste other people's time. I also research a problem before asking for help, but I ask for help and admit that I do not know something when it is appropriate.
How do you deal with difficult clients?	Not often
What project has been your favorite in your career?	Long term investigations encompassing multiple devices and online data sources.
How do you deal with stress?	Exercise, both strength training and aerobics. Being proactive in dealing with adversity, whether technical or human in origin.
Can you describe a time you failed and how you moved on?	I dealt with legal applications and orders on a regular basis. The law gets very granular in its review, especially when dealing with the ever-changing landscape of digital devices and data. Mistakes happen. The key to recovering from a mistake or dealing with a crisis is, "Do not make it worse." If I made a mistake that bore on a legal issue, I explained it in my affidavit. Even if you have a good explanation, a mistake looks worse if it looks like you "got caught," instead of you were forthright, admitted the error, explained it, and took steps to recover from the mistake.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Learn more networking skills. Incorporate responding to network/ cyber domains into your training programs.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	The more skill sets you develop, the more value you bring to bear in a job or any mission.
Submitting Mentor:	**Daniel Arrugueta**
	Senior Cyber Forensics Examiner
	Equifax, Inc.

Please describe your job.	Inventor, company founder, CTO/CEO of a Network Security startup
How long have you been doing this job?	3.5 years
What was your first job in the IT industry?	1980, Lockheed, Early WAN Multi-site Network Protocol Engineer
What do you think are the three most important skills to have these days when working in the IT industry?	Theory of Operation Practical Experience Ability to Communicate
What soft skills do you wish you'd mastered early in your career?	Still working... understanding others... motivating others... respecting others... kindness
Describe your working style.	Creative, long hours, opportunistic, rapid change, persistent
How do you deal with difficult clients?	Put the best person on the team to work with them. Someone patient, yet effective.
What project has been your favorite in your career?	Inventing and patenting a product, developing and bringing to market. This one.
How do you deal with stress?	Compare my stress to Jesus Christ's, and take up his encouragement
Can you describe a time you failed and how you moved on?	Business failure at the same time my daughter was born with a severe heart defect, she died 10 years later. Moved on by motivation to see her again someday when business would not consume precious time together.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Monetize earlier. Trust your gut. Go for the brass ring. Ask for more stock.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Learn theory, test theory, use theory. Do not "upgrade, reboot, or replace" to solve problems.
Submitting Mentor:	*Bill Alderson* *Founder & CTO HOPZERO Security* *HOPZERO*

Please describe your job.	Entrepreneur (Founder / CEO)
How long have you been doing this job?	5 years
What was your first job in the IT industry?	Analyst
What do you think are the three most important skills to have these days when working in the IT industry?	SQL Excel PowerPoint
What soft skills do you wish you'd mastered early in your career?	Not getting angry when people say stupid things in meetings.
Describe your working style.	Collaborative and immersive. I try to get the best out of others, while recognizing when its more efficient to do it myself.
How do you deal with difficult clients?	Whatever they are upset about, fix it immediately, and communicate the process before, during and after the fix.
What project has been your favorite in your career?	I build an artificial intelligence learning engine and launched a company with it.
How do you deal with stress?	Talk to my wife
Can you describe a time you failed and how you moved on?	I fail daily, even hourly. I try to embrace as many opportunities as possible, and maybe 5% of them work out. I move on by simply focusing on the next opportunity.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Start a company, don't take a job. And do it when you are young and single with no children. Also, since you are on a computer in 1993 using the internet, you should really start a company using the internet in 1993.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Always be learning. New technology comes along almost daily, you need a basic understanding of what is out there, and the ability to recognize when a new technology is so good that your company should embrace it. When that happens, take a weekend and learn how to be a programmer in the new tech, before assigning work to your development team.
Submitting Mentor:	*Dr. Ralph Thomas* *CEO* *Quick Custom Intelligence*

Please describe your job.	I am a digital forensic examiner for a major metropolitan area police department in the U.S. Midwest. I perform forensic examinations on various forms of digital media, but primarily "dead box" computer forensics and mobile device (mostly cell phones) forensics, in support of criminal investigations.
How long have you been doing this job?	Five years
What was your first job in the IT industry?	This is my first job in the IT industry. I previously worked in the intelligence field in both municipal law enforcement and the U.S. military.
What do you think are the three most important skills to have these days when working in the IT industry?	Communication Curiosity Perseverance or Grit
What soft skills do you wish you'd mastered early in your career?	I wish I could master communication. I haven't yet. I'm not sure communication can be mastered. There is always room for improvement. The ability to make the complex understandable to a layperson is an invaluable skill. I have found that the ability to develop analogies on the fly is crucial.
Describe your working style.	Logical, analytical, linear, and data oriented. I've been an investigator for a long time and learning how to follow evidence and make decisions based on those findings has led to, and likely demanded this working style.
How do you deal with difficult clients?	By doing my best to set realistic expectations and achievable goals from the beginning of the relationship. Again, communication is critical. Only promise what you can honestly deliver and keep your promises. If you fail (we all do sometimes) take responsibility and do everything you can to fix it.
What project has been your favorite in your career?	Planning and development of criminal intelligence databases. Even though the project died on the vine due to a variety of reasons, it was fun and exciting to build something from complete scratch, test it, and prove that it could work. I lost count of the times I broke it and fixed it. It was a lot of fun and I learned so much.
How do you deal with stress?	Reading fiction and listening to or playing music
Can you describe a time you failed and how you moved on?	I failed to get a database project get accepted and implemented. I spent a couple of years on it, and it was demoralizing to have it dismissed. I gave myself a little time to be mad about it, then forced myself to find something else to work on that I cared about just as much. I actively sought out a new purpose.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Start with the basics. It's easier that way. I jumped into forensics without mastering the basics of IT (i.e., A+, Net+, CISCO basics), and have had to backtrack. Trying to go too fast makes for a weak foundation that will eventually crumble or have to be repaired. Learn from my mistakes. Start at the beginning.

Please share any final thoughts or advice with your peers or up-and-coming technologists.	Get comfortable with being uncomfortable. I received this advice from the instructor of my first programming class, and it resonated with me. If it's easy, you aren't learning. Most of the time when things are easy, it's because you already know how to do them. It is when you are struggling, when you are uncomfortable, when you are frustrated, that you are learning. So, get excited when it's hard. It means you're getting better.
Submitting Mentor:	*Detective / Digital Forensic Examiner*

Please describe your job.	Technology and Management consulting for Hospitality, Gaming, Software and other technology firms.
How long have you been doing this job?	35 years
What was your first job in the IT industry?	Developed software to manage and track orders of wood doors, jambs and frames from China including sending orders and receiving updates via Telex.
What do you think are the three most important skills to have these days when working in the IT industry?	Logical thinking skills Analytical and Quantitative skills including a questioning attitude towards everything Initiative (is that a skill?) - always looking at what is happening and what could be better
What soft skills do you wish you'd mastered early in your career?	- Defining objectives and results and sticking to it without being distracted by other cool stuff. - Learning that what motivates me is not what motivates everyone else and further learning how to motivate everyone else. - Focus on story telling as a way of communication.
Describe your working style.	I prefer to define and write down what I want to achieve and how I know I will have achieved it. If I'm working with a team or consulting with a customer, I share and get buy in. All technology serves a purpose and if you're not working towards that purpose, your work will not be as valuable. I use search engines relentlessly seeing if anyone has done or is doing what I am working on. Technology, like other fields, is expanding exponentially and access to information increases every day. I tend to dissect whatever I'm working with. I don't always recommend this as it's time consuming but understanding the building blocks of any system, and how they communicate, provides a greater understanding of the whole.
How do you deal with difficult clients?	Any relationship with difficulties I view as a failure on both parties. With a client relationship, there needs to be a clear understanding of what value you are providing. Never engage a client, boss, or anyone without a clear understanding of what the work is, preferably in writing. If there is an issue, you have something to refer back to at the point there was a meeting of the minds. You need to be always in communication regarding the work being done. The nature of our industry is change which means you will need to update this as the project progresses. Frameworks like Scrum can help drastically reduce difficulty with clients.
What project has been your favorite in your career?	I designed the technology for a hotel in Seattle Washington called Hotel 1000 which opened in 2006. It was the first, or one of the first, to use all ethernet over twisted pair cabling for phones, televisions and internet. It also included one of the first high speed Internet WiFi systems which was dense enough for clients like Starbucks, Amazon and Microsoft to use the meeting space. We created custom software which let people push a button on their phone to summon their car from Valet along with several other features now standard in today's hotels. It was the technology leader in hotels when it opened.
How do you deal with stress?	My friends ask me this all the time as I don't really stress. When you think about stress, it's usually focused on something you couldn't control or something you don't have. I realized long ago that I can't control other people or events, but I can control my reaction to them. I do feel frustration once in a while when something logical doesn't happen though instead of focusing on the frustration, it pushes me to figure out why.

Can you describe a time you failed and how you moved on?	Early in my career, I thought I was smarter than I was. I flew to a client's site on a Friday to upgrade a storage system over the weekend. Instead of waiting until Saturday morning to start, I dived right in. There were numerous issues and I ended up being there all night into the next day. All the issues were foreseeable had I just waited and discussed them the next morning prior to beginning. A 4-hour upgrade turned into a 48 hour rebuild and restore. I learned constant communication and teamwork will not prevent failure, but I've learned it can reduce its impact and help recover faster.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Writing software can be an individual sport but to be successful in the technology industry, it is a team sport. Technology is more than ones and zeros as all technology serves a purpose. I'd also advise myself that there is more money to be made in creating products than in providing services.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Technology is a big jigsaw puzzle. Don't force the pieces but also don't be afraid to create your own replacements sometimes. A former mentor used to yell at me to "take my head out of the monitor" which was his way of saying don't lose the forest for sake of a tree. It's been easy to focus on the task at hand but always remember that overall object and results you are shooting for.
Submitting Mentor:	***Mark Munger*** ***Consultant and Technology Enthusiast*** ***Valcros, LLC***

Please describe your job.	Mr. Yeung has over two decades of IT architecture & security related experience, including extensive experience as an integrator and distributor of IT products and services. In 1991, Mr. Yeung founded Triware Networld Systems, a San Francisco Bay Area IT systems integrator and in 2000, he founded Triware Networld Solutions, Inc., a San Francisco Bay Area solution provider for IT knowledge management. In 2011, Mr. Yeung co-founded Rocket EMS, Inc. – an aggressive new company specializing in Electronic Manufacturing Services for fast growth high technology companies with a heavy focus in the New Product Introduction (NPI). Since 1991, Mr. Yeung has also been working closely with various VC firms & startups in Silicon Valley as an Investor, Visionary, Strategist, Technologist and Board of Advisors, Directors or Trustees. In 2018, Mr. Yeung founded Triware Networld Capital, a Venture Capital & Investment firm. Since 1991, Mr. Yeung has consulted on IT and business-related issues to over 350 small, medium, & large organizations in six continents. Many of those 350 plus companies went IPO, got acquired while many more mistakes made, and lessons learnt at the same time. For more than two decades, Mr. Yeung has spent a significant amount of time in IT security fields including being a forensics investigator, auditor and has a deep understanding of the state of IT security issues and has developed frameworks and best practice methodologies for the field.
How long have you been doing this job?	Since 1984
What was your first job in the IT industry?	Computer operator in 1984, computer programmer in 1986 & network engineer in 1990 - in this order... until I decided network engineer was more interesting and where the fun was; then I have been pretty much staying in areas where networking, working with network & security architecture are part of what I do.
What do you think are the three most important skills to have these days when working in the IT industry?	Understand where the technologies and industries are going

Capable of learning fast

Match skills to high value, real world solutions |
What soft skills do you wish you'd mastered early in your career?	Being able to present my ideas as a marketer, not an engineer.
Describe your working style.	Working HARD at all times...
How do you deal with difficult clients?	Find a better one ;-) I generally don't work for any single client at a given time.
What project has been your favorite in your career?	I always enjoy solving problems, the harder the problems, the more enjoyable to me... Especially if it's a problem, I'd not seen before. One time with a defense manufacturer, I'd to produce court ordered evidence across hundreds of servers in a very large network, tight schedule and very specific key words the court was looking for in early 1990s; I was able to write a script, did the searches and print the documents automatically to the printers, yes printers because there were such a huge amount of evidences, I had to network a pool of printers together so that we could complete the requirements on time. At the end of the project, we produced a truck load of evidence - that I suspect not one would be able to read them all.

How do you deal with stress?	Whenever I'm asked of this question, I would share an ancient Chinese proverb "Choose a job you love, and you will never have to work a day in your life." Stress usually comes from things we don't enjoy doing or dealing with.
Can you describe a time you failed and how you moved on?	Part of being in IT is to learn from failures, hopefully more from others than your own ;-) - starting from my programming days, dealing with failures are a necessary part of IT, in fact, life... Also just know, no one is perfect; failure is not the issue, how one deals with failure is. There is always tomorrow to start over.
If you could go back in time to when you started in this industry, what advice would you give yourself?	The world is full of problems to be solved. Spend more time on high impact projects...
Please share any final thoughts or advice with your peers or up-and-coming technologists.	I believe existing IT fundamental technologies are right for a HUGE disruption - for the better. Pay attention; some impossibilities may become realities and soon.
Submitting Mentor:	***Benson Yeung*** ***Lifetime Entrepreneur & Non-Linear Thinker*** ***Triware Networld Systems, LLC***

Please describe your job.	Principal Engineer (Vendor), acting as pre-sales and post-sales support
How long have you been doing this job?	6 years
What was your first job in the IT industry?	Network Engineer
What do you think are the three most important skills to have these days when working in the IT industry?	Being honest
	Having initiative
	Being fast learner
What soft skills do you wish you'd mastered early in your career?	communication with the other people
Describe your working style.	Collaborative, Open
How do you deal with difficult clients?	Honestly presenting where we are
What project has been your favorite in your career?	It is always some big migration
How do you deal with stress?	Sport activities after working hours
Can you describe a time you failed and how you moved on?	Firewall change when I brought customer's DC down. I tried to listen and learned from mistakes
If you could go back in time to when you started in this industry, what advice would you give yourself?	I will do the same. Learning, learning and learning every single day.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Cyber security is a hot topic, try to learn as much as you can. And do not try to be expert for one single technology, that area is history. More you know, better for you.
Submitting Mentor:	*Doctor-Iv*
	Principal Engineer
	Riverbed Technology

Please describe your job.	Packet analysis consulting for clients. Wireshark training.
How long have you been doing this job?	15 years
What was your first job in the IT industry?	Network engineering - For a company that designed network test and troubleshooting tools (Fluke Networks)
What do you think are the three most important skills to have these days when working in the IT industry?	Packet Analysis with Wireshark Cybersecurity Python (or at least some programming language)
What soft skills do you wish you'd mastered early in your career?	Patience! I have had to learn how to be patient both with myself and with others. Patience helps with everything from working well in a team to learning a new skill.
Describe your working style.	Relaxed but focused. When it's crunch time, buckle down and get it done. At the same time, the building isn't always on fire so chill the heck out!
How do you deal with difficult clients?	Clearly state facts, get it all in writing, look for common ground. I really try to help them see me as an ally and on their team, not as someone who is on the opposing side. Keep cool at all costs.
What project has been your favorite in your career?	Slowly and steadily building my YouTube channel. It has put me into contact with people all over the world. It has helped me learn new facets of the tools and protocols I love and has helped me land some awesome customers.
How do you deal with stress?	I get quiet, go inside my head. I have to back up and write lists and prioritize my tasks. Then when the wave of stress is over, I sit on my couch and binge-watch something while playing a mindless iPad game.
Can you describe a time you failed and how you moved on?	I have failed a lot, but each time has helped me learn something new. One that seemed to happen more than any other was when I was speaking at a conference or seminar and someone calls out a question about something that I really don't know about my subject. I used to try to bluff it and guess at the answer and hope that everyone can just move on - but one time I was called out by an expert in the audience who made it clear that I didn't know what I was talking about - I was super embarrassed, but it was exactly what I needed. I learned when I am teaching or presenting to be clear about what I know and don't apologize for what I don't know since nobody knows everything. The good thing is that each question I am asked that I am shaky on sparks my curiosity and I always want to find out later what the answer was - especially so I can share it the next time I present.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Learn programming earlier, don't be afraid to take risks, don't settle for a mundane job you don't enjoy. Take care of people because relationships are everything.

Please share any final thoughts or advice with your peers or up-and-coming technologists.	Hello packet people!! Look, our industry can get pretty cold. It's full of wires, electrons and blinky lights. Don't let it be. Find mentors and thankfully soak up all you can. Be grateful that they took the time on you. When you learn something, immediately look for a way to share it, to be someone else's mentor. In this industry, there will always be someone more experienced than you and someone less experienced. Don't do the "My knowledge makes me important, so I don't want to share it" thing. That will only bite you in the end and it's just not cool. Find a niche that you enjoy and master it, but don't be afraid to make mistakes and fall on your face. Stay as current as you can, but don't let that thought overwhelm you, since you can't stay 100% current on everything. And last but not least - if you are not having fun, change something! There is far too much to do in this industry to be bored or stagnant or to work with people you don't enjoy.
Submitting Mentor:	*Chris Greer* *Packet Head* *Packet Pioneer*

Please describe your job.	Managing Director - digital forensics and eDiscovery
How long have you been doing this job?	20+ yrs
What was your first job in the IT industry?	IT security trainee
What do you think are the three most important skills to have these days when working in the IT industry?	Ability to see the "big picture" Case management Ability to communicate with stakeholders.
What soft skills do you wish you'd mastered early in your career?	Better business or report writing.
Describe your working style.	Flexible. Non-routine. Try my best to "think outside the box".
How do you deal with difficult clients?	Patience. Communication. Explanation.
What project has been your favorite in your career?	Any complex projects that require creative thinking and unorthodox approach.
How do you deal with stress?	Hobbies. Family. Friends.
Can you describe a time you failed and how you moved on?	Live by the motto "life goes on". Pick up the pieces and learn from the mistakes.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Be more assertive and sell your vision (i.e., both business and practice area) to management. (Rather than wait for work to be assigned.)
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Be proactive to connect and reach out to experts and practitioners in the field. While it may sound like another cliché, but the importance of networking and professional connections is invaluable to one's career.
Submitting Mentor:	*Kevin Lo* *Managing Director* *Froese Forensics Partners Ltd.*

Please describe your job.	I provide design and technical assistance and support to customers in North America for Taps, packet brokers and network visibility tools.
How long have you been doing this job?	1 month
What was your first job in the IT industry?	Right out of the Navy in 1982 I started worked for a Robotics Corporation in Silicon Valley programming in a hybrid assembler and repairing robotic equipment and working on industrial fiber networks as a field engineer.
What do you think are the three most important skills to have these days when working in the IT industry?	Do something you love to do Invest in yourself. Get the training you need; Get the tools you need.
What soft skills do you wish you'd mastered early in your career?	Listening. Human Behavior and Psychology. People problems are always harder than the technical problems.
Describe your working style.	I love to work on hard problems, and finding resolution gives me great satisfaction. I keep reference materials handy in case I need to look something up. I ask for help when I need it. I respect my peers and keep good working relationships with my colleagues.
How do you deal with difficult clients?	LISTEN. Sometimes by the time we get a problem, the customer has already tried several things and worked with other people. Their boss may be frustrated and angry at them. They're under pressure to get results. Show how you can help them, Listen to the issues. Set realistic expectations. Without realistic expectations, you and your customer may not be happy at the end of your project, even if you do a good job.
What project has been your favorite in your career?	Catching foreign hackers trying to gain entrance into client sites.
How do you deal with stress?	You're not going to help anyone, if you're too stressed to think straight and stay focused. Get up, go outside, get some air, go for a walk, gather your thoughts. Making notes and staying organized will help reduce stress. If you're spending too much time on a particular approach, try a different approach. Ask for help when you need it. Don't lose your sense of humor.
Can you describe a time you failed and how you moved on?	I worked on an interconnection problem to a federal database which was crashing at the clients. We had no visibility to the federal side, and couldn't get visibility, so I had to troubleshoot completely one-sided. After finding several problems, bad equipment, nic bricks, half-duplex nic connections and layer 1 issues, I finally proved the real problem was not connectivity/network, it was an image problem on the workstations. The customer was disappointed that I didn't find an actual "network problem". A different team had to re-image the devices with a known working image, and that resolved the issue. While my guidance led the way and I was the lead, and felt I did a great job, they were confused about my methodology because they're not network analysts. I should have done a better job Setting Expectations. After several discussions to understanding better the process I gained back their trust. Sometimes it's hard to be the analyst, and the person who has to also have the skills to explain everything at a level the customer can understand.

If you could go back in time to when you started in this industry, what advice would you give yourself?	Computers and Networking has become a large industry. Do what you love. Many network engineers have asked me to show them what I do to be a protocol analyst, but once they start to learn what it entails, most of them decided it wasn't for them. That's OK. Keep trying things, find what your niche is, and dive in to be the best. Don't stop learning and asking questions. Nobody knows it all.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	If you're looking for training, and think Protocol Analysis is your passion, there is NOBODY better at training than Chappell University. I have been in several of Laura's' classes over the years, she is hands down the best in the world. If you need literature, the books she has written are concise, well-written, with examples, explanations, and even have some humor sprinkled in. All the best to you and have fun!
Submitting Mentor:	*John Modlin* *Senior Systems Engineer North America* *Profitap*

Please describe your job.	Sr Network Performance Specialist
How long have you been doing this job?	30 years
What was your first job in the IT industry?	Print shop in a Bank's datacenter
What do you think are the three most important skills to have these days when working in the IT industry?	Adaptability self-motivated interpersonal skills
What soft skills do you wish you'd mastered early in your career?	writing
Describe your working style.	always listening and delivering what the client's needs, not necessarily what they want
How do you deal with difficult clients?	Try to get their deliverables documented
What project has been your favorite in your career?	building a wireless high-speed internet for my area since there was none
How do you deal with stress?	document and get what's in my head down on paper and focus on what I can deal with first
Can you describe a time you failed and how you moved on?	once I did a router upgrade without an electronic config backup but luckily had a paper one but had to retype the entire config. learned to always make a backup and never believe the vendor
If you could go back in time to when you started in this industry, what advice would you give yourself?	shut up and listen, you don't know everything and never tell a client to 'calm down'
Please share any final thoughts or advice with your peers or up-and-coming technologists.	worked at a back where they outsourced and insourced the IT staff twice. doesn't matter if you are let go or outsourced, always stay focused on what you like to do, and the rest will follow
Submitting Mentor:	*Tony Fortunato* *Sr Network Performance Specialist* *The Technology Firm*

Please describe your job.	I am founder of Security company and Security researcher
How long have you been doing this job?	10
What was your first job in the IT industry?	Security Consultant
What do you think are the three most important skills to have these days when working in the IT industry?	Digital Literacy Security awareness Initiative
What soft skills do you wish you'd mastered early in your career?	written & verbal communication skills to explain the innovative ideas to businesspeople.
Describe your working style.	I have positive mind set to try new things should experience the up & down rather than listening naysayers when trying new things. I am self-motivated. Accuracy & speed team dynamics and solo work.
How do you deal with difficult clients?	stay calm and listen to them and listen to their concerns then give prompt reply regarding the issue. after that figure out what wrong happened, find solution and give them. from this lesson learned use for future difficult deals.
What project has been your favorite in your career?	always projects in Penetration testing has been interested and other security projects as well.
How do you deal with stress?	I keep away from work related stuffs during weekends. doing some yoga or meditation things. still it's a hypothetical question.
Can you describe a time you failed and how you moved on?	I always study the reasons why failed and fix them., take responsibilities for failure. keep the motivation up for success. found inspirational advice from experienced people and Moved forward again, don't get stuck in mulling this situation over for too long.
If you could go back in time to when you started in this industry, what advice would you give yourself?	use the opportunities always keep unique track with you be focused on what you want use senior/experts to grow yourself more & more don't be ignorant to keep communication channels within your industry
Please share any final thoughts or advice with your peers or up-and-coming technologists.	I would say that keep up to date with upcoming technologies that will help to remain in security industry. do not limit yourself with certain area, learn new things whenever have time, try new things.
Submitting Mentor:	*Rajivarnan.R* *CEO| Security Researcher* *Cyberarch Consulting OÜ*

Please describe your job.	Board of Directors
How long have you been doing this job?	20 years
What was your first job in the IT industry?	Desktop support technician
What do you think are the three most important skills to have these days when working in the IT industry?	Security
	Cloud technology
	Virtualization
What soft skills do you wish you'd mastered early in your career?	The ability to write well
Describe your working style.	I love digging deep into a technology learning as much about it as possible and seeing how I can use to solve problems
How do you deal with difficult clients?	I let them exhaust their complaint and then I will ask they what is the best way I can help them solve their problem
What project has been your favorite in your career?	Working with John Williams at Cisco supporting the IPX/SPX protocol
How do you deal with stress?	Spend time by myself in a quiet place
Can you describe a time you failed and how you moved on?	I learn from all of my failures and turn them into success
If you could go back in time to when you started in this industry, what advice would you give yourself?	Don't waste time, be as effective and efficient as possible. Learn the technology beyond what anyone requires and do the things that you love within reason
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Follow you heart and gut feeling, do the things that excite you, always be extremely kind and courteous to everyone.
Submitting Mentor:	*Derek Casanares*
	Board of Directors
	Inter-City Services Inc

Please describe your job.	Education. First14 years: in charge of planning, installing, maintaining all networks, devices and computer systems at Los Medanos College. Also designing, installing and operating video conference facilities, and online CMS, training and supporting teachers and staff. Then 14+ years to now: fulltime teaching of CCNP, CCNA, A+, Net+, Sec+, CEH, VoIP, Digital Forensics at Las Positas and Chabot Colleges.
How long have you been doing this job?	28+ years
What was your first job in the IT industry?	Student computer services worker while studying Electronics/Computers.
What do you think are the three most important skills to have these days when working in the IT industry?	Disciplined, organized, logical approach Critical thinking and analysis skills Willingness to ask questions and search for and evaluate answers
What soft skills do you wish you'd mastered early in your career?	Writing clearly and concisely. Keeping better notes and documentation, as I go. Working in groups with people with whom I disagree.
Describe your working style.	I tend to gather information, then think about things a lot, maybe sketching out a number of approaches, and maybe sleeping on it. I do keep paper and pen at the bedside, to write things down.
How do you deal with difficult clients?	Try to just start from scratch, and talk through things slowly, from the beginning, asking lots of questions.
What project has been your favorite in your career?	Designing and implementing everything about online Spanish classes, from the physical network, to servers and software, to writing the websites in Spanish, training teachers, and working with students.
How do you deal with stress?	I play music with friends and professionally, get out into nature, participate in non-profit orgs, and play with my cats.
Can you describe a time you failed and how you moved on?	My first try at getting a fulltime teaching job was the first time I presented to a hiring committee. Afterward, I sought out two members of the committee for help, and reviewed what I'd done to plan better, and practice. Second time, I got hired.
If you could go back in time to when you started in this industry, what advice would you give yourself?	I'd say to finish the degree the first time. Although - leaving school set me on the course that got me here today, and, today, degrees are far less important. I would tell myself that you are doing well, the mentors you found will be important, and the way you are diving deep into things, like when I studied with the chairs of the IEEE committees, and with the architect of the CSU videoconferencing system, will be important for the future, so keep at it. Apprenticeship and internship will be extremely valuable, so cultivate those.

Please share any final thoughts or advice with your peers or up-and-coming technologists.	Make lots of friends and connections online, both serious and silly. Learn to ask good questions, and ask them all over - in forums, and of your mentors, friends and co-workers. And, give good answers when you can - the group mind we create and maintain is important. Keep a good database of information yourself. That process will help you organize and clarify your mind, your thoughts and your writing. It's not just all Google - that does not do well for your thinking.
Submitting Mentor:	*John Gonder*
	Professor
	Chabot College

Please describe your job.	Customer support
How long have you been doing this job?	Since 2000
What was your first job in the IT industry?	Engineer at a distributor company
What do you think are the three most important skills to have these days when working in the IT industry?	Ability to stay focused (as opposed to attention deficit promoted by the social media)
	Ability to study and perform own research (as opposed to harassing the forums repeating the same question already asked there earlier)
	Extensive experience in writing scripts
What soft skills do you wish you'd mastered early in your career?	1. With humans fast is slow, but slow is fast 2. When communicating any conclusions stay with the facts and know where to stop. If the facts are ambiguous, then just say so and stop there 3. Admit mistakes early and have a plan to move on 4. Stay open to new clues: if a customer mentions in passing reference something unexpected, then probably there is a good reason for that
Describe your working style.	Think first. Take your time to research. If you do not have a name for something, it doesn't mean that it doesn't exist. Rather it will keep bugging you until you name it and deal with it. Words spoken cost nothing. Overcommunication is a symptom of something important missing. Keep the important communications written
How do you deal with difficult clients?	1. Keep it clear what you think, why you think so and what is required to change your conclusion(s) 2. The customer has his/her own reasons. The fast that these reasons are not known to you does not render him/her an idiot 3. If the customer wants a second opinion, rest assured that he/she will have it either way.
What project has been your favorite in your career?	English language. Data mining
How do you deal with stress?	Take your time, have some rest and fun. Sleep is when one is most vulnerable, anyone who slept less had a better chance to survive but over all these millions of years evolution failed to eliminate sleep. There probably is a darn good reason why.
Can you describe a time you failed and how you moved on?	A failure is also an experience. File it for future reference and move on
If you could go back in time to when you started in this industry, what advice would you give yourself?	Pointless: each phase of our lifetime successfully protects itself from any future experience with a wall of ignorance.

Please share any final thoughts or advice with your peers or up-and-coming technologists.	Periods of harmony and conflict are equally natural to humans. Of the two harmony being the time for parasites to flourish
Submitting Mentor:	*G.* *Support engineer* *F5 Networks*

Please describe your job.	My job is to identify and measure risk. This enables good decisions about how to protect our business.
How long have you been doing this job?	15+ years
What was your first job in the IT industry?	Systems engineer and trainer.
What do you think are the three most important skills to have these days when working in the IT industry?	Understand your company's business. Develop critical thinking. Pick an area of interest and specialize.
What soft skills do you wish you'd mastered early in your career?	I wish I'd learned to ask better questions and listen more carefully to the answers.
Describe your working style.	Agree on results to be achieved, help when asked and otherwise don't get in the way.
How do you deal with difficult clients?	Consider that they might have a point. Reframe and confirm that you're both asking the same questions.
What project has been your favorite in your career?	Building a risk program from a blank sheet.
How do you deal with stress?	First - be alert to it and recognize it. Then step back and consider if the problem is as big as it seems. Usually it isn't.
Can you describe a time you failed and how you moved on?	Every failure had some connection to not understanding or agreeing with another person. The way to move on is to find ways to understand and agree.
If you could go back in time to when you started in this industry, what advice would you give yourself?	As you work to know more and more, embrace the things you don't know and let them guide you. You can't see the whole path from the start.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	When applied well, technology is really good at answering questions. Make sure you are asking the right questions. You won't produce a good answer to a bad question.
Submitting Mentor:	*Information Risk Manager*

Please describe your job.	Technical Consulting and Engineering in network infrastructures
How long have you been doing this job?	2
What was your first job in the IT industry?	IT installer/administrator/educator in a transport/expedition company
What do you think are the three most important skills to have these days when working in the IT industry?	Distinguishing marketing from facts/needs
	People influencer getting budget.
	Lifecycle management.
Describe your working style.	Carefully listening/capturing customer needs
How do you deal with difficult clients?	As usual, take them carefully, and convince them on facts.
What project has been your favorite in your career?	Migration tests with other suppliers
How do you deal with stress?	Trying to avoid them, then try to focus on something else or just watching TV.
Can you describe a time you failed and how you moved on?	Actually, I am right in that time, but looking forward, writing applications and pick up trends, by educational course- cyber security
If you could go back in time to when you started in this industry, what advice would you give yourself?	IT Technology is like fashion, today it's a need - tomorrow is old fashioned.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Is computing the only world? Or are you also capable to do with your hands, mind and social environment?
Submitting Mentor:	*Etienne Stoffels*
	Senior Telco Engineer
	Arobis GmbH

Please describe your job.	Tasks are varied from working with server automation tools, to training teammates, to enforcing security policies/processes, to managing a password vault, and working trouble tickets. My career has had me in nearly every position from the help desk to interim CIO.
How long have you been doing this job?	7+ years in current position
What was your first job in the IT industry?	Data Entry/tax table coding on an NCR 399 minicomputer, working with my father for one of his clients
What do you think are the three most important skills to have these days when working in the IT industry?	Adaptability
	Business acumen
	Vendor neutral attitude
What soft skills do you wish you'd mastered early in your career?	Office politics, and the knowledge that it's better to quickly admit when you've made a mistake and ask for help when necessary.
Describe your working style.	Very flexible, I have a large team I work with, but I do a lot if solo work as well. I'm good at working with all levels, and any position, up to CxOs.
How do you deal with difficult clients?	Depends on the issue and the person, this is where adaptability comes in, as you may have to switch your tactic depending on the situation, the level of the person, or their personality.
What project has been your favorite in your career?	Being the entire IT department for a specialty department within a Children's Hospital. Brought them from being the least IT usage, to the most advanced department on very limited budgets.
How do you deal with stress?	Depends on the day or week. I have several coping techniques depending on the level of stress being felt. This includes breathing techniques, exercise, gardening, creative outlets, or talking to friends.
Can you describe a time you failed and how you moved on?	Expect many failures during your career and realize that as long as you've learned from it things will be ok. My most recent "favorite", was a terrific learning opportunity. I used the wrong feature in a new tool, which caused a push to all the client devices at one site and I didn't catch it right away. I called in reinforcements to help with the cleanup, advised the support team at the site so they understood what happened and what we could do to fix it, and made sure my management knew it was my fault. It all worked out to our benefit and we renamed the feature after me and trained new staff to not touch it. It's funny now and when I'm training new folks, I tell them the story behind the nickname.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Switch to Pre-Med.

Please share any final thoughts or advice with your peers or up-and-coming technologists.	I'll give you the same advice my professors gave us. You're entering a field of continual learning. Keep your skills current (and be prepared to shell out some significant money to do so) and stay marketable. It is also on par with doctors for stress levels and divorce rates; it's the nature if the work. And finally, realize you will be working with a wide variety of people from a variety of backgrounds and cultures. Leave your biases at the door.
Submitting Mentor:	*Mary Matthews*
	System Admin II

Please describe your job.	Project Manager in Federal Govt.
How long have you been doing this job?	2 yrs
What was your first job in the IT industry?	Teacher
What do you think are the three most important skills to have these days when working in the IT industry?	Ability to communicate
	Critical thinking
	Flexible mindset
Describe your working style.	Open and transparent
How do you deal with difficult clients?	Engage them. Listen to them.
What project has been your favorite in your career?	A major middleware infrastructure project with Intersystems
How do you deal with stress?	Decompress with quality time, rest and exercise
Can you describe a time you failed and how you moved on?	Many. Use it as a learning opportunity. Always is.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Keep life balance
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Always hire the best help. It makes you look good
Submitting Mentor:	***Annette Parsons***
	Project Manager
	Federal Govt

Please describe your job.	Advising and assist deploying Cyber solutions. following a develop framework that uses a method call CORE. We configure, deploy and maintain the solution or if you wish help you meet (train) the gap.
How long have you been doing this job?	This type of work, over 30years.
What was your first job in the IT industry?	Working repairing memory backs on computers, troubleshooting motherboards... that was 1986
What do you think are the three most important skills to have these days when working in the IT industry?	Some technical knowledge Some people skills Communication skills
What soft skills do you wish you'd mastered early in your career?	Definitely communications, and more from the perspective of explaining things in relation to common everyday relation
Describe your working style.	Before a very technical knowledge, let me show you how smart I can be. Now, is let me see if I can get you to see the why we need to do it this way.
How do you deal with difficult clients?	Simplify the problem and make an association to something that they are familiar. Is my believe that is my issue to get my idea across, not the other way around.
What project has been your favorite in your career?	Data center and centralize control room project. It required at the end re-up and segment an entire company, bunch of work but we had a great team helping each other out.
How do you deal with stress?	Usually by taking a step back or try to put myself on who may be stressing me out... usually don't get things bother me.
Can you describe a time you failed and how you moved on?	So many times that I have had a failure but the ones that ai remember is the ones that I learned. I have disconnected, cut pull the wrong cable, completely deleted all drive access, etc.
If you could go back in time to when you started in this industry, what advice would you give yourself?	There is always more to learn, and always someone that knows that more than you, until you decide to become the person to go on a specific area.
Please share any final thoughts or advice with your peers or up-and-coming technologists.	Give it time, and always listen when someone is trying to help you. respect and be humble about your wins.
Submitting Mentor:	*Julio C Jimenez* *Secure Advisory Services /partner* *Intellegenesys*

Please describe your job.	Network analyst, writer, instructor – oh, and virtual event host, and CEO
How long have you been doing this job?	The first part – since 1989 at Novell. I've been doing online events for about 10 years.
What was your first job in the IT industry?	I was a network administrator – well… not your typical network administrator. I was lucky to have mastered the IBM PC when it first came out. Soon we were tying them together with an operating system (Novell's NetWare). I spent a lot of time "temping" as a network administrator at a lot of different companies. I didn't want to stay in one place, so I got to see a lot of different business configurations/needs/personality types.
What do you think are the three most important skills to have these days when working in the IT industry?	Clear, concise verbal and written communication skills
	Adaptability
	Self-learning (oh, geez… I need to add "sense of humor," but that's #4… drat!
What soft skills do you wish you'd mastered early in your career?	Business planning
Describe your working style.	Some days drudging through the "must do" projects, other days going "all in" on a cool project. Pretty relaxed work style and team.
How do you deal with difficult clients?	Grin and bear it. I've not had many really difficult clients – it's usually a matter of the paper-pushers slowing things down and making everything more complex than it needs to be.
What project has been your favorite in your career?	I would have to say hosting CORE-IT ranks up there with Interplanetary Space analysis. This has been a fascinating project and I hope we can help others host virtual conferences going forward.
How do you deal with stress?	Hmmm… given the world today, there's a fair amount of stress. I usually lock myself in my office to get the stressful project completed and get it off my desk. I work with some great people and we usually do "The View" first thing in the morning over coffee. We catch up on each other's lives/families/stories. That puts things in perspective. I also try to do mosaic work – nothing like smashing ceramic tiles to ease your stress!
Can you describe a time you failed and how you moved on?	Oh my… I try not to focus on the failures, and just hold onto the lessons. I did, however, give a horrid keynote at a conference in 2018. It was a difficult year with the death of a loved one. I shouldn't have tried to put a smile on my face and do anything in front of a crowd at that time. I bombed big time and had to apologize to the conference promoter. I will never "push through" that level of emotional pain again. I will explain the situation and remove myself from a situation like that.
If you could go back in time to when you started in this industry, what advice would you give yourself?	Try harder in that coding class! I took a coding class at Novell and thought it would be funny to do "Hell World," instead of "Hello World." I got kicked out of the class. Sigh. Someday I'd like to work on coding classes again.

Please share any final thoughts or advice with your peers or up-and-coming technologists.	Stay positive. Sometimes the ever-changing tech industry seems overwhelming. Spend a little bit of time each day learning something new.
Submitting Mentor:	*Laura Chappell*
	Network Analyst, Host of the CORE-IT Virtual Conference
	Chappell University

Survey Responses by Question

If you are just interested in the entire set of answers, you're in the right place!

Please describe your job.

I am the owner of a boutique consulting firm. We offer training for the WCNA for Wireshark Certification and custom classes. We also offer consulting; we come onsite capture the right packets at the right time to solve network and application mysteries. I'm a small business owner, so have to juggle a lot of projects at once.

IT generalist

Network engineer

Virtual infrastructure deployment and administration

Network Architect

IT General

Network & Security Consultant

IT security

I create cyber security contests for K-14 and I teach college cyber security classes.

I administer network monitoring systems used in the NOC of a rural cellular provider.

Networking Manager

As the CEO of a WiFi Analytics company, I oversee that customers are happy with our solution and that the product is progressing to help customers now and in the future.

Pre-Sales Solutions Architect

I'm an IT Compliance guy taking care of the ISMS (information security management system) at our company

Support engineer networking and security

I do incident response and forensics. Can't go into more detail...sorry.

Technical writer and illustrator

Engineer, Network Technologist, Technical Writer

I perform network forensics investigations in incident response situations as well as doing network security design/architecture/enhancement projects and general consulting related to CyberSecurity. I built Security Operation Centers for various customers (with up to 120k+ employees) and trained their security analysts.

Develop and implement effective IT strategies that complied with organizational and legal standards, supporting current IT strategies. Act as a focal point to align IT and business through strategic initiatives. Enable coordination across all organizational assets, proactively supporting multiple projects. Utilize high-level IT and software test engineering skills.

Chief Forensic Officer (CFO)

Criminal Investigation   Sheriff's Office

Cyber Forensics Examiner

Inventor, company founder, CTO/CEO of a Network Security startup

Entrepreneur (Founder / CEO)

I am a digital forensic examiner for a major metropolitan area police department in the U.S. Midwest. I perform forensic examinations on various forms of digital media, but primarily "dead box" computer forensics and mobile device (mostly cell phones) forensics, in support of criminal investigations.

Technology and Management consulting for Hospitality, Gaming, Software and other technology firms.

Mr. Yeung has over two decades of IT architecture & security related experience, including extensive experience as an integrator and distributor of IT products and services. In 1991, Mr. Yeung founded Triware Networld Systems, a San Francisco Bay Area IT systems integrator and in 2000, he founded Triware Networld Solutions, Inc., a San Francisco Bay Area solution provider for IT knowledge management. In 2011, Mr. Yeung co-founded Rocket EMS, Inc. – an aggressive new company specializing in Electronic Manufacturing Services for fast growth high technology companies with a heavy focus in the New Product Introduction (NPI). Since 1991, Mr. Yeung has also been working closely with various VC firms & startups in Silicon Valley as an Investor, Visionary, Strategist, Technologist and Board of Advisors, Directors or Trustees. In 2018, Mr. Yeung founded Triware Networld Capital, a Venture Capital & Investment firm.   Since 1991, Mr. Yeung has consulted on IT and business-related issues to over 350 small, medium, & large organizations in six continents. Many of those 350 plus companies went IPO, got acquired while many more mistakes made, and lessons learnt at the same time.   For more than two decades, Mr. Yeung has spent a significant amount of time in IT security fields including being a forensics investigator, auditor and has a deep understanding of the state of IT security issues and has developed frameworks and best practice methodologies for the field.

Principal Engineer (Vendor), acting as pre-sales and post-sales support

Packet analysis consulting for clients. Wireshark training.

Managing Director - digital forensics and eDiscovery

I provide design and technical assistance and support to customers in North America for Taps, packet brokers and network visibility tools.

Sr Network Performance Specialist

I am founder of Security company and Security researcher

Board of Directors

Education. First14 years: in charge of planning, installing, maintaining all networks, devices and computer systems at Los Medanos College. Also designing, installing and operating video conference facilities, and online CMS, training and supporting teachers and staff. Then 14+ years to now: fulltime teaching of CCNP, CCNA, A+, Net+, Sec+, CEH, VoIP, Digital Forensics at Las Positas and Chabot Colleges.

Customer support

My job is to identify and measure risk. This enables good decisions about how to protect our business.

Technical Consulting and Engineering in network infrastructures

Tasks are varied from working with server automation tools, to training teammates, to enforcing security policies/processes, to managing a password vault, and working trouble tickets. My career has had me in nearly every position from the help desk to interim CIO.

Project Manager in Federal Govt.

Advising and assist deploying Cyber solutions. following a develop framework that uses a method call CORE. We configure, deploy and maintain the solution or if you wish help you meet (train) the gap.

Customer service

Network analyst, writer, instructor – oh, and virtual event host, and CEO

I started as an employee of Network General in 1997 and have been on my own since 2000.

25 years

5 years

twenty years

+/- 20 years

6 Years

38 years background in networking and 24 years background in security.

28

I have been doing these things for about 6 years

Five years. Before that, 20 years as a **nix system admin.

more than 25 years

8 years

20+ years

IT Compliance: 7 months, IT Security: about 2 years, IT in general: almost 20 years

21 years

2 years+ out of a 30+ year old career.

Close to 10 years

55+ years

15 years

11 Years

15 yrs

20 yrs

10 years

3.5 years

5 years

Five years

35 years

Since 1984

6 years

15 years

20+ yrs

1 month

30 years

10

20 years

28+ years

Since 2000

15+ years

2

7+ years in current position

2 yrs

This type of work, over 30years.

20 years

The first part – since 1989 at Novell (31 years). I've been doing online events for about 10 years.

Running a Novell network in 1992.

desktop support

service desk support

Programmer Analyst

Technician. I installed and repaired modems and multiplexers.

Virus Repair Shop

Setting up 4Mbps Token Ring & 10Mbps 10Base-5 or 10Base-2 networks connected to either Sun Microsystems Unix, DEC Vax servers, IBM S/36 or S/38 mainframes, OS/2 or Novell Netware 286 servers.

developer

My first job was IT help desk; doing the simple things like fixing printers, log in problems, Wi-Fi, eventually moving up to basic server management.

I started as a DEC VAX system manager in the avionics labs for the C-17 transport. I completed a programming certificate at Control Data Institute to get into IT.

CADD coordinator

IT Technical support for a smaller company. PC Setup, pulling cables, doing backups, configuring servers, and helping a staff of about 100 with everything from mouse issues to software support.

Fix and repair at IBM

My first job was being a system administrator for good old Sun Solaris machines

Engineer (but also networking)

An all-around network engineer/server administrator/client guy in a manufacturing plant for a large agribusiness company.

Sales Manager for Network General

Research Engineer

I started in computer game Q&A, which is a lot less exciting than it may sound :-)

Computer instructor and programmer

Field Engineer for Computer Manufacturer

Finding kiddy porn and decryption

Digital Forensics Investigator

1980, Lockheed, Early WAN Multi-site Network Protocol Engineer

Analyst

This is my first job in the IT industry. I previously worked in the intelligence field in both municipal law enforcement and the U.S. military.

Developed software to manage and track orders of wood doors, jambs and frames from China including sending orders and receiving updates via Telex.

Computer operator in 1984, computer programmer in 1986 & network engineer in 1990 - in this order... until I decided network engineer was more interesting and where the fun was; then I have been pretty much staying in areas where networking, working with network & security architecture are part of what I do.

Network Engineer

Network engineering - For a company that designed network test and troubleshooting tools (Fluke Networks)

IT security trainee

Right out of the Navy in 1982 I started worked for a Robotics Corporation in Silicon Valley programming in a hybrid assembler and repairing robotic equipment and working on industrial fiber networks as a field engineer.

Print shop in a Bank's datacenter

Security Consultant

Desktop support technician

Student computer services worker while studying Electronics/Computers.

Engineer at a distributor company

Systems engineer and trainer.

IT installer/administrator/educator in a transport/expedition company

Data Entry/tax table coding on an NCR 399 minicomputer, working with my father for one of his clients

Teacher

Working repairing memory backs on computers, troubleshooting motherboards... that was 1986

I was a network administrator – well… not your typical network administrator. I was lucky to have mastered the IBM PC when it first came out. Soon we were tying them together with an operating system (Novell's NetWare). I spent a lot of time "temping" as a network administrator at a lot of different companies. I didn't want to stay in one place, so I got to see a lot of different business configurations/needs/personality types.

Ability to learn quickly

being able to communicate IT needs to management

technical understanding about allot of technologies. These days it is important to understand that your job isn't your job anymore, but you have to do it with multiple teams and players.

Good writing and communication skills

Networking: switching and routing.

The ability to want to go farther or find out how something works

Know thy packets. It took numerous years to gather the experience I have today, but I would do it all over again if I had to.

cybersecurity

Always willing to learn new technology!

Customer service - know how to talk to users to help them with a problem

Networking as a Service

Ability to learn and adapt to new technologies

Security, prevention, detection and white hat

Constant thirst to learn something new

Curiosity

Passion for the industry and technology. You have to be hungry and continue to always learn or you will get left behind.

Good general knowledge of network structure

Listening skills

Open minded communication skills

Data Analysis

Ability to improvise

Understanding the criminals on the net

Networking knowledge

Theory of Operation

SQL

Communication

Logical thinking skills

Understand where the technologies and industries are going

Being honest

Packet Analysis with Wireshark

Ability to see the "big picture"

Do something you love to do

adaptability

Digital Literacy

Security

Disciplined, organized, logical approach

Ability to stay focused (as opposed to attention deficit promoted by the social media)

Understand your company's business.

Distinguishing marketing from facts/needs

Adaptability

Ability to communicate

Some technical knowledge

interpersonal skills are still necessary, even behind a keyboard

Ability to shift gears midway through a project

if you can, focus on a few core skills

Troubleshooting skills: understand that the solution is sometimes only the solution for the incident and not for the problem.

A cool head in a crisis

Network and endpoint security.

Solid foundation

Baselining... unless you have a baseline of something operating properly, it's really hard to pinpoint where problems might be.

innovation

Public Speaking

Troubleshooting - know how your system works and how to analyze its problems

Cloud Integration

Good communication skills

Scripting in different languages

Good analytical skills

Adaptability

Network, network, network. If you don't know how to do something, you need to have a pool of smart people to reach out to. We can't know it all.

Good general knowledge of the various tools used to manage networks

Always inquisitive

Broad knowledge about how IT and the rest of the business work together

Information Security

Ability to think/act like a crook/hacker

Security and or protection of data

Cyber tool configuration and monitoring

Practical Experience

Excel

Curiosity

Analytical and Quantitative skills including a questioning attitude towards everything

Capable of learning fast

Having initiative

Cybersecurity

Case management

Invest in yourself.

self-motivated

Security awareness

Cloud technology

Critical thinking and analysis skills

Ability to study and perform own research (as opposed to harassing the forums repeating the same question already asked there earlier)

Develop critical thinking.

People influencer getting budget.

Business acumen

Critical thinking

Some people skills

know how to turn on the computer

Ability to listen, not just be thinking of what to say next but really listen

always learn, don't stop

Learn to adapt. Moving on is important in the changing technology.

A passion for the technology and an intense desire to stay current

Cloud architecture and cloud security.

Open mind

Never give up... regardless of how impossible it may seem. My worst nightmare problem took 3 months to figure out! But it was well worth it.

learning

Technical Writing

Communications - know how to collect information from and pass it on to other people

Application visibility

An ability to work with both on premise and cloud-based infrastructure

Infrastructure knowledge (what is in the Data Center and outside the data center)

Soft skills (as most problems are not caused by machines but by people)

The ability to plan you own career

Don't forget work/life balance. It shouldn't be 100% tech.

Good general knowledge of the various tools used to maintain a network

never stop learning

specialty area skills, e.g. network forensics

Cloud Operations

Ability to approach a problem with an insatiable amount of curiosity

How to catch data thief in a breach

Working knowledge of multiple OS families

Ability to Communicate

PowerPoint

Perseverance or Grit

Initiative (is that a skill?) - always looking at what is happening and what could be better

Match skills to high value, real world solutions

Being fast learner

Python (or at least some programming language)

Ability to communicate with stakeholders.

Get the training you need; Get the tools you need.

interpersonal skills

Initiative

Virtualization

Willingness to ask questions and search for and evaluate answers

Extensive experience in writing scripts

Pick an area of interest and specialize.

Lifecycle management.

Vendor neutral attitude

Flexible mindset

Communication skills

Clear, concise verbal and written communication skills

Adaptability

Self-learning (oh, geez… I need to add "sense of humor," but that's #4… drat!

What soft skills do you wish you'd mastered early in your career?

Organization. The number of capture files you have to store grows exponentially as time marches on. Come up with a naming convention and stick to it. I use the customer name in a folder, then where|what|why. Put your notes about the where|what|why into the capture file (Statistics | Capture File Comments), where were you physically capturing (on the host, from a tap, from a SPAN, etc.) what prompted the capture, what are you trying to prove/disprove, what is the trouble ticket #? Any detail you can think of. As you make filters, use the filename stem then underscore what were you filtering and what were you trying to achieve. This will save time when you go back to look for things, trust me. Treat your paperwork and receipts the same way. Tax time comes no matter what project you are working on. Be ready.

how to motivate others to change

Learning politics. The OSI Model is 7 layers but there are 2 more 8: Users 9: Politics

Good people management skills. Good sales/presentation skills.

Programming skills related to TCP/IP. Scripting

Ways to better understand your audience in their actions.

I spent more time on the bleeding edge of technology so that I could surpass others, I forgot about acquiring managing skills and because a lone wolf sort of super trouble shooter. But I wish I would have gathered a bit more managing skill. I did master speaking in front of large crowds (600 people) early on in life and I'm glad I did.

I wish I had quickly mastered Public Speaking and Technical Writing. Employers and supervisors aren't always tech savvy, which means you need to have the skills to talk and write "in English" to them.

Problem-Solving, Creativity, Work Ethic, Interpersonal Skills, Time Management, Communication, Adaptability

The ability to explain to non-technical coworkers why a technical problem really needs to be solved now instead of later in terms they can relate to.

Usage of currently available tools, identifying new threats. How the tools are used by those trying to hack into a network.

Leadership! During my first job interview I was asked "do you want to lead sometime in the future?", I denied at this point of time, a big mistake.

People management. Understanding large corporations

How to listen. Sometimes in IT we can feel like we know it all, and we forget who our customer is. Listening to their concerns, issues, advice, feedback, whatever is hugely important. Added to the above, how to communicate. A lot of IT folks don't know how to carry on a conversation with someone. There are books written on the subject, but communication is huge! *****Also, make yourself dispensable. You will never grow in your profession if you squirrel away information because nobody will want to move you out of that spot. Document, document, make sure everybody knows your job and then when opportunities come up, they aren't afraid to promote you or put you on cool projects.

I picked up most of my technical training while I was in the military. When I began taking college courses, I focused on taking classes from the Bachelor of Arts curriculum. I took classes in English, Social Studies, Math, Communications and Speech. So, the military had helped me with my technical skills and college had rounded me out so I could communicate effectively. Had I stayed in

school I could have saved time achieving my goals. And, the college degree would have raised my ability to attain higher position in a company. It was my experience that most companies do not offer Director or Vice President to people that do not have a degree.

learn to write descriptively, keep good records, always keep learning and questioning, Make good technical friends... like Laura

Creativity, Communication, and Teamwork

Legal degree   Financial analysis / cash flow / domestic and international regulations

Programming

Collaboration (in an atmosphere where people are held responsible for their performance). A team is more effective than an individual, but a team dragging dead weight that is rewarded for being dead weight is a burden.

Still working... understanding others... motivating others... respecting others... kindness

Not getting angry when people say stupid things in meetings.

I wish I could master communication. I haven't yet. I'm not sure communication can be mastered. There is always room for improvement. The ability to make the complex understandable to a layperson is an invaluable skill. I have found that the ability to develop analogies on the fly is crucial.

- Defining objectives and results and sticking to it without being distracted by other cool stuff. - Learning that what motivates me is not what motivates everyone else and further learning how to motivate everyone else. - Focus on story telling as a way of communication.

Being able to present my ideas as a marketer, not an engineer.

communication with the other people

Patience! I have had to learn how to be patient both with myself and with others. Patience helps with everything from working well in a team to learning a new skill.

Better business or report writing.

Listening. Human Behavior and Psychology. People problems are always harder than the technical problems.

writing

written & verbal communication skills to explain the innovative ideas to businesspeople.

The ability to write well

Writing clearly and concisely. Keeping better notes and documentation, as I go. Working in groups with people with whom I disagree.

1. With humans fast is slow, but slow is fast 2. When communicating any conclusions stay with the facts and know where to stop. If the facts are ambiguous, then just say so and stop there 3. Admit mistakes early and have a plan to move on 4. Stay open to new clues: if a customer mentions in passing reference something unexpected, then probably there is a good reason for that

I wish I'd learned to ask better questions and listen more carefully to the answers.

Office politics, and the knowledge that it's better to quickly admit when you've made a mistake and ask for help when necessary.

Definitely communications, and more from the perspective of explaining things in relation to common everyday relation

Business planning

Describe your working style.

Changes every project, but I do research and learning in the beginning, then focus in on what I can do to get the deliverable done.

I try to teach others why we do things and not tell them do it this way

When an incident is reported I like to talk again to the people who reported it. These days there are allot of channels and not all the information is getting in the right way to the one who is trying to fix the problem. Sometimes you read all the information and think "Oh let's try this because it sounds like this will fix it" but after talking to the client you think "Owh did they meant that. Then I have to try this"

Collegial

I work as network architect and also as network & security responsible.

Normal IT at a hospital

Leisure... work at "my pace" style. I also strive to find something that should be done but which nobody has yet to do and then either do it myself, or talk to those who can do it if it's outside of my scope of work and follow through to see that they do it. All companies need improvement somewhere. Look for it, find it and run with it. In the end, you'll be making your own work and not be handed somebody else's work! And I like it that way!!!

serious

I work in teams to get tasks done. Working collaboratively with a goal or vision allows ideas to spring up and gets everyone deeply involved in positive ways that make the goal/vision achievable and better than you expected.

Flexible, supportive, linear. I may be working on a configuration when I have to stop to work on a user's problem. I don't resent it when I have to stop working on one thing to help a user, because I know their work depends on the systems I support. I'm logical and go from step A to step B to step C to ...

Logical, analytical, planned, integrative, and ideation-oriented

Paced

Hands on

It's a good mix between "hands-on" and "follow the guidelines". IT is not always just binary, and the real truth lies somewhere in between

Troubleshooting from the hip.

I like to get in at least 1-1.5 hours earlier than anybody else to ease into work. It gives me time to get going, get caught up on email, and in short start the day. I always take 15-20 minutes at night before I go to bed and write down how the day went.... what did I learn that day?

I have never considered that I have a work style. I generally adjust how I work with clients by how I perceive what they expect from me.

Dedicated, focused, but casual and always helping others

I prefer gaining hands-on experience to reading books before starting. I try and test and experiment and read up specific things if I don't understand what's happening.

Creativity, Communication, and Teamwork

Laid back...

Google is my friend!

While I can work as an effective team member, I am also comfortable working alone and planning my approaches and analyses. I do not like my time wasted, so I do not waste other people's time. I also research a problem before asking for help, but I ask for help and admit that I do not know something when it is appropriate.

Creative, long hours, opportunistic, rapid change, persistent

Collaborative and immersive. I try to get the best out of others, while recognizing when its more efficient to do it myself.

Logical, analytical, linear, and data oriented. I've been an investigator for a long time and learning how to follow evidence and make decisions based on those findings has led to, and likely demanded this working style.

I prefer to define and write down what I want to achieve and how I know I will have achieved it. If I'm working with a team or consulting with a customer, I share and get buy in. All technology serves a purpose and if you're not working towards that purpose, your work will not be as valuable. I use search engines relentlessly seeing if anyone has done or is doing what I am working on. Technology, like other fields, is expanding exponentially and access to information increases every day. I tend to dissect whatever I'm working with. I don't always recommend this as it's time consuming but understanding the building blocks of any system, and how they communicate, provides a greater understanding of the whole.

Working HARD at all times...

Collaborative, Open

Relaxed but focused. When it's crunch time, buckle down and get it done. At the same time, the building isn't always on fire so chill the heck out!

Flexible. Non-routine. Try my best to "think outside the box".

I love to work on hard problems, and finding resolution gives me great satisfaction. I keep reference materials handy in case I need to look something up. I ask for help when I need it. I respect my peers and keep good working relationships with my colleagues.

always listening and delivering what the client's needs, not necessarily what they want

I have positive mind set to try new things should experience the up & down rather than listening naysayers when trying new things. I am self-motivated. accuracy & speed team dynamics and solo work.

I love digging deep into a technology learning as much about it as possible and seeing how I can use to solve problems

I tend to gather information, then think about things a lot, maybe sketching out a number of approaches, and maybe sleeping on it. I do keep paper and pen at the bedside, to write things down.

Think first. Take your time to research. If you do not have a name for something, it doesn't mean that it doesn't exist. Rather it will keep bugging you until you name it and deal with it. Words spoken cost nothing. Overcommunication is a symptom of something important missing. Keep the important communications written

Agree on results to be achieved, help when asked and otherwise don't get in the way.

Carefully listening/capturing customer needs

Very flexible, I have a large team I work with, but I do a lot if solo work as well. I'm good at working with all levels, and any position, up to CxOs.

Open and transparent

Before a very technical knowledge, let me show you how smart I can be... Now, is let me see if I can get you to see the why we need to do it this way.

Some days drudging through the "must do" projects, other days going "all in" on a cool project. Pretty relaxed work style and team.

How do you deal with difficult clients?

I once had to sit in a customer's office and refuse to leave until I got paid. It got ugly, but I got my check. Don't be afraid to stand up for yourself but try to not let it get that far. Usually customers become difficult when they are stressed, someone is probably breathing down their neck over the outage. Look at it from their perspective. Ask "what can we do to get this solved?"

Being as patient as I can. Even when people just don't want to learn

When I have a difficult client, I try to keep in mind that it isn't personal. They have a problem with IT and not with me. (yet ;)) Sometimes you have to let them rage on and when they unleashed all the steam you can begin fixing the problem. "I understand your problem and I would like to see how we can fix this."

Gently but firmly

I do not deal directly with clients, so this is not applicable in my job.

Try to make the situation best by giving them different ideas on the situation.

Objectively, cautiously, but openly and frank. I've found that sincere honesty helps get one through the difficult times. Just be careful of what you say and how you say it so as not to piss the customer off.

cooling attitude

Take a deep breath, have patience, and ask questions that will aid you in understanding the issue they have and come up with a resolution.

Stay patient, don't make it personal, and listen to what they say. Think through what they tell me so I can get to the heart of the issue and deal with that. Be up front and tell them whether it's something that I can resolve or not.

Stay calm, listen to their concerns, deliver a prompt reply, offer a solution, cut your losses, Review and learn

I like to be upfront as much as possible with both good and bad issues. I have found most clients don't want surprises, and as much as I can mentally prepare them for any downtime, disruptions, etc. if it happens, they knew it was a possibility, and aren't as concerned.

Hear what they have to say, let them get it off their chest, acknowledge that you share their concerns and ask what they would like to do next and let's move forward

No client is difficult, different people are having different problems. It's vital to understand that everybody has some reason to behave the way he does. To understand this fact can help to overcome some obstacles already at the beginning of a discussion

Find a shovel big enough to work handle the shit. (Farm boy humour)

It gets back to the soft skills. Most non-technical people view technology as a tool. If the tool stops working, they can't do their job. Understand where they're coming from and its smooth as melted butter. In short, empathize.

I try to get them to tell me as completely as possible what they are shopping for or what problem they are trying to fix. I have found through the years, if I treat my clients with respect, they treat me with respect.

Teach Them and be patient! They are usually difficult because they are in an area that they do not understand. Lack of knowledge leads to fear, fear leads to anger. Become a friend that is helping them learn and overcome anger and being difficult!

Listen carefully, ask questions when things are unclear, try to understand their pain points and adapt my approach so that the outcome is acceptable for all parties involved.

Tried as much as possible to reach a consensus plan of action and a mutual business process

I don't -- I let them be someone else's problem.

In my career, put them in jail

Not often

Put the best person on the team to work with them. Someone patient, yet effective.

Whatever they are upset about, fix it immediately, and communicate the process before, during and after the fix.

By doing my best to set realistic expectations and achievable goals from the beginning of the relationship. Again, communication is critical. Only promise what you can honestly deliver and keep your promises. If you fail (we all do sometimes) take responsibility and do everything you can to fix it.

Any relationship with difficulties I view as a failure on both parties. With a client relationship, there needs to be a clear understanding of what value you are providing. Never engage a client, boss, or anyone without a clear understanding of what the work is, preferably in writing. If there is an issue, you have something to refer back to at the point there was a meeting of the minds. You need to be always in communication regarding the work being done. The nature of our industry is change which means you will need to update this as the project progresses. Frameworks like Scrum can help drastically reduce difficulty with clients.

Find a better one ;-) I generally don't work for any single client at a given time.

Honestly presenting where we are

Clearly state facts, get it all in writing, look for common ground. I really try to help them see me as an ally and on their team, not as someone who is on the opposing side. Keep cool at all costs.

Patience. Communication. Explanation.

LISTEN. Sometimes by the time we get a problem, the customer has already tried several things and worked with other people. Their boss may be frustrated and angry at them. They're under pressure to get results. Show how you can help them, Listen to the issues. Set realistic expectations. Without realistic expectations, you and your customer may not be happy at the end of your project, even if you do a good job.

Try to get their deliverables documented

stay calm and listen to them and listen to their concerns then give prompt reply regarding the issue. after that figure out what wrong happened, find solution and give them. from this lesson learned use for future difficult deals.

I let them exhaust their complaint and then I will ask they what is the best way I can help them solve their problem

Try to just start from scratch, and talk through things slowly, from the beginning, asking lots of questions.

1. Keep it clear what you think, why you think so and what is required to change your conclusion(s) 2. The customer has his/her own reasons. The fast that these reasons are not known to you does not render him/her an idiot 3. If the customer wants a second opinion, rest assured that he/she will have it either way.

Consider that they might have a point. Reframe and confirm that you're both asking the same questions.

As usual, take them carefully, and convince them on facts.

Depends on the issue and the person, this is where adaptability comes in, as you may have to switch your tactic depending on the situation, the level of the person, or their personality.

Engage them. Listen to them.

Simplify the problem and make an association to something that they are familiar. Is my belief that is my issue to get my idea across, not the other way around.

Grin and bear it. I've not had many really difficult clients – it's usually a matter of the paper-pushers slowing things down and making everything more complex than it needs to be.

Every single consulting gig where I get to say, "well there's your problem right there". It is still a tremendous rush.

Installing a new IDS system

The best projects are the one you want to start to fix your work. Implementing a monitoring solution was the best project because I learned so much about keeping control of the devices.

Setting up DR centers and co-location sites. Supporting radiological imaging applications.

Implementation of Palo Alto firewalls.

Setting up a threat hunting landscape.

I would say my 2011 work with the Ministry of Education in Japan to set up the world's fastest supercomputer "The K Computer" (made by Fujitsu) in their RIKEN (Physics and chemistry Laboratory) in Kobe Japan. 32Tbps back in 2011!!! Think about that number for a minute! You can do a low lever format of 1.5 Petabytes of disk space in less than 10 minutes! The write speed of that supercomputer was faster than their read speed because writing is sequential whereas reading is random! It was totally the best project of my life!

cybersecurity

My favorite projects have been creating regional competitions. I come up with a vision for a contest, my team works together to plan the day, the technical portion and then see our vision come to life. It is a great experience every time.

Supporting the ground control system for the Boeing/ULA Delta IV rocket. Great people to work with, interesting work (Rocket launch!), and a satisfying result from the work (Successful rocket launch!)

Networking, security, Cloud computing, Cloud Networking, Omnichannel, ERP

Building an on premise, bare metal, load balanced web server and partitioned db server back end solution to help a company scale.

Had a software application that had network issues and I was able to configure it and make it work when others said it couldn't be done

The migration of an old host system which was only possible between Christmas Eve and Boxing Day to keep operations up and running. We felt like heroes as we finished everything in time

Building a SOC infrastructure for the Dutch government.

I converted a legacy system running a bunch of old Unix systems into something manageable. Unfortunately, due to an NDA I can't go into more detail.

My time with Network General. I liked everything about it. The people, the product and the perks.

Defining needed technology, Designing and help build some of the world's best network test equipment!

Any project where I was able to help a customer in a critical situation, usually in incident response. These often require working a lot of overtime hours, but you can tell that you're making a difference.

The implementation of new core banking software and enterprise network deployment in over 400 locations or business units for the biggest Microfinance bank in Sub-Sahara Africa.

Taking a series of patents, I had granted (that relate to Cyber Security / Virus analysis) and bringing same to market.

Forensics on a computer that exonerated, when one wanted so bad to fire 2.

Long term investigations encompassing multiple devices and online data sources.

Inventing and patenting a product, developing and bringing to market. This one.

I build an artificial intelligence learning engine and launched a company with it.

Planning and development of criminal intelligence databases. Even though the project died on the vine due to a variety of reasons, it was fun and exciting to build something from complete scratch, test it, and prove that it could work. I lost count of the times I broke it and fixed it. It was a lot of fun and I learned so much.

I designed the technology for a hotel in Seattle Washington called Hotel 1000 which opened in 2006. It was the first, or one of the first, to use all ethernet over twisted pair cabling for phones, televisions and internet. It also included one of the first high speed Internet WiFi systems which was dense enough for clients like Starbucks, Amazon and Microsoft to use the meeting space. We created custom software which let people push a button on their phone to summon their car from Valet along with several other features now standard in today's hotels. It was the technology leader in hotels when it opened.

I always enjoy solving problems, the harder the problems, the more enjoyable to me... Especially if it's a problem, I'd not seen before. One time with a defense manufacturer, I'd to produce court ordered evidence across hundreds of servers in a very large network, tight schedule and very specific key words the court was looking for in early 1990s; I was able to write a script, did the searches and print the documents automatically to the printers, yes printers because there were such a huge amount of evidences, I had to network a pool of printers together so that we could complete the requirements on time. At the end of the project, we produced a truck load of evidence - that I suspect not one would be able to read them all.

It is always some big migration

Slowly and steadily building my YouTube channel. It has put me into contact with people all over the world. It has helped me learn new facets of the tools and protocols I love and has helped me land some awesome customers.

Any complex projects that require creative thinking and unorthodox approach.

Catching foreign hackers trying to gain entrance into client sites.

building a wireless high-speed internet for my area since there was none

always projects in Penetration testing has been interested and other security projects as well.

Working with John Williams at Cisco supporting the IPX/SPX protocol

Designing and implementing everything about online Spanish classes, from the physical network, to servers and software, to writing the websites in Spanish, training teachers, and working with students.

English language. Data mining.

Building a risk program from a blank sheet.

Migration tests with other suppliers

Being the entire IT department for a specialty department within a Children's Hospital. Brought them from being the least IT usage, to the most advanced department on very limited budgets.

A major middleware infrastructure project with Intersystems

Data center and centralize control room project. It required at the end re-up and segment an entire company, bunch of work but we had a great team helping each other out.

I would have to say hosting CORE-IT ranks up there with Interplanetary Space analysis. This has been a fascinating project and I hope we can help others host virtual conferences going forward.

How do you deal with stress?

All the common vices.

I unplug from technology for a time. Even if it is only a few hours.

sit back and take a (small) coffee break. Then I can focus on how to get rid of the stress.

Deep breathing and remembering that work is not important, only family.

Time pressure reasonably well. Having a project working without making fundamental errors can be stressful.

Fly quads after work!!!

Analyze packets... LOL... but serious... that's how I alleviate my stress. There are always new protocols coming out and if there's one I'm not familiar with, I download the RFC, read it, find a sample capture .pcap file and start learning about every single bit of that new protocol. It keeps me from getting stressed while I'm doing something I like!

cool

Having a hobby helps (mine is music). Taking time off and taking care of yourself are also ways I deal with stress.

I try to maintain the perspective that the work is not as important as other things in my life. Look at the big picture - world, universe, God - and anything that happens on the job is small potatoes.

Track your stressors, develop healthy responses, establish boundaries, take time to recharge, learn how to relax

Exercise

Stop take a deep breath, stand up stretch a little and relax, somethings you just have to work through

Stress will always be present. Just make sure it doesn't stay too high for a given amount of time. Playing with the kids at home helps to focus on the things which are really counting in your life

Enjoy the bang of work dropping of your desk on the floor because your desk is full. If it happens you might as well enjoy it.

Meditation and I have 2 dogs.

I don't do well with stress, so I try to work in a way so I can avoid stress.

My stress is usually caused by not understanding stuff, so I really dive in and read to learn! Also dealing with people that are internal politicians and usually includes narcissistic behavior and lying to hurt others.

I make sure I have enough "personal time off" and turn off my business cellphone and do not read emails. And if a project turns stressful it helps to get enough sleep. Worst case: headphones and good music :-)

Sometimes do a solo walk, watch movies, or engage in political discussions

Couple hours on a combat firing range with a 50-cal. rifle

Shoot, build custom PC, work harder on python programming, and make wife mad.

Exercise, both strength training and aerobics. Being proactive in dealing with adversity, whether technical or human in origin.

Compare my stress to Jesus Christ's, and take up his encouragement

Talk to my wife

Reading fiction and listening to or playing music

My friends ask me this all the time as I don't really stress. When you think about stress, it's usually focused on something you couldn't control or something you don't have. I realized long ago that I can't control other people or events, but I can control my reaction to them. I do feel frustration once in a while when something logical doesn't happen though instead of focusing on the frustration, it pushes me to figure out why.

Whenever I'm asked of this question, I would share an ancient Chinese proverb "Choose a job you love, and you will never have to work a day in your life." Stress usually comes from things we don't enjoy doing or dealing with.

Sport activities after working hours

I get quiet, go inside my head. I have to back up and write lists and prioritize my tasks. Then when the wave of stress is over, I sit on my couch and binge-watch something while playing a mindless iPad game.

Hobbies. Family. Friends.

You're not going to help anyone, if you're too stressed to think straight and stay focused. Get up, go outside, get some air, go for a walk, gather your thoughts. Making notes and staying organized will help reduce stress. If you're spending too much time on a particular approach, try a different approach. Ask for help when you need it. Don't lose your sense of humor.

document and get what's in my head down on paper and focus on what I can deal with first

I keep away from work related stuffs during weekends. doing some yoga or meditation things. still it's a hypothetical question.

Spend time by myself in a quiet place

I play music with friends and professionally, get out into nature, participate in non-profit orgs, and play with my cats.

Take your time, have some rest and fun. Sleep is when one is most vulnerable, anyone who slept less had a better chance to survive but over all these millions of years evolution failed to eliminate sleep. There probably is a darn good reason why.

First - be alert to it and recognize it. Then step back and consider if the problem is as big as it seems. Usually it isn't.

Trying to avoid them, then I try to focus on something else or just watching TV.

Depends on the day or week. I have several coping techniques depending on the level of stress being felt. This includes breathing techniques, exercise, gardening, creative outlets, or talking to friends.

Decompress with quality time, rest and exercise

Usually by taking a step back or try to put myself on who may be stressing me out... usually don't get things bother me.

Hmmm… given the world today, there's a fair amount of stress. I usually lock myself in my office to get the stressful project completed and get it off my desk. I work with some great people and we usually do "The View" first thing in the morning over coffee. We catch up on each other's lives/families/stories. That puts things in perspective. I also try to do mosaic work – nothing like smashing ceramic tiles to ease your stress!

Can you describe a time you failed and how you moved on?

We all fail. Talk to someone further in your desired career that you respect and ask how they would have handled it. My Dad used to say that you only fail when you stop trying. It's true, but it doesn't me you have to keep trying the same thing. Test and tweak, it works in networking and in life.

I installed a pre-release patch and brought the network down for a day and 1/2. I was fortunate I didn't lose my job. Now I read as much as I can about each patch I install.

remember the old 3com switches? The one where you CAN'T use the last 2 ports because they are shared with the uplinks? First time I patched that interface the switch came unresponsive and allot of people couldn't work anymore... Sorry. But if people work, they WILL make mistakes. It only matters to don't make the mistake again and take your responsibility.

There are many times I have failed to realize my goals. I step back, re-assess, find a new path, and try my best not to dwell on it. My learn from our mistakes and we build on our successes.

Implementing new multi-layer switches in a data center and see at the end that some things did not work. I moved on with first taking logs, dumps etc. followed with rolling back to the old situation and see with the implementer how to solve the issues.

We got it easy were we are at it is almost impossible to fail.

I cannot really say that I've failed myself. One company failed me, and all the rest of the employees and it went under 2.5 years after I left. Actually, I wanted to leave it 1.5 years earlier but because I was the main lead... it was hard to pull out then. I immediately found a new job and have been doing fine ever after.

Failure is part of learning. In my line of work, my experiments tend to fail more often than not. At first it can seem overwhelming to fail, but you have to think of it not as a scoreboard, but more as a learning experience. Take the scientific method and try again from a different angle; take some time to walk around and come back with a fresh mind, do something completely different like washing dishes, sleep on it if you can. The inspiration for success will come!

An HP UNIX cluster had an FDDI interface to an Ethernet switch. I decided to change the FDDI interface MTU to 1500 so the switch wouldn't have to split the FDDI packets. When I made the change, the whole cluster died, and 75 developers lost access to their work. When the first ones started banging on the server room door, I told them I was bringing the cluster back up, not telling them I was the one that brought it down. Later I told my boss what really happened, and he just told me not to do that again. It taught me to do more planning and research before making changes to a system.

talk about a real failure you've had, starting by describing the situation, take responsibility and don't make excuses for the failure, show what you learned from the experience,

Way too many to pick from. I've found the best way for me to move on is just to keep going. If I just keep going, there will be a new challenge or opportunity soon enough that I'm engrossed in, and I'll forget about how I messed up something the last time.

Had an application that could not do what the customer asked, tried to fix a work around to meet the customers satisfaction but that couldn't be done. I just had to explain to the customer what he was asking of the product it was not meant to do and there was nothing that could be done. Just had to be honest with him let him know we tried everything we could do and move to the next project

At some point of time you'll realize that making mistakes is just human. We are no robots! Just make sure you are learning from your mistakes and using that knowledge to do it better next time

I used to have problem making decisions, so I tended to delay them. The biggest wisdom was when I learned that not making a decision is also a decision.

I actually got fired from a job by a narcissist boss. Luckily, I'm good at what I do, and I was networked. My reputation spoke for itself, I remained calm, and it ended up all being for the good.

I was fired once in my life. But my next job was much better than the one that I left. I don't even remember the name of the company that let me go.

As an Electrical Engineer and tool designer failure is part of success. No one ever built or designed anything that worked 100% on completion. So, failure is a function of learning. I have experience failure many times where something I designed or planned failed, I learned from it and improved my approach and always asked for help from my technical friends. The Chinese say that falling is not failure it is NOT in getting up and carrying on! This is where your real friends will come and help!

I sent a gold master CD for a computer game to the duplication factory that was missing a critical piece of software, resulting in 10.000 CDs that didn't work. I moved on by admitting it's my fault, not trying to hide my mistake which turned out to be the right option.

After three weeks of go-live of a new core banking system, the process was stopped by the Bank's management as a result of slow connectivity. I have to re-engineer the entire process, change the network deployment framework, engaged consultants and conduct more training. We have to re-implement the data migration process and successfully go-live again after 18 months.

Not really. Every project I've been involved in has always had several backup plans ready to execute, so there were no failures per se.

My failures are with getting admin to understand why we need to spend on more than one program for the same job, as a mechanic has more than one wrench.

I dealt with legal applications and orders on a regular basis. The law gets very granular in its review, especially when dealing with the ever-changing landscape of digital devices and data. Mistakes happen. The key to recovering from a mistake or dealing with a crisis is, "Do not make it worse." If I made a mistake that bore on a legal issue, I explained it in my affidavit. Even if you have a good explanation, a mistake looks worse if it looks like you "got caught," instead of you were forthright, admitted the error, explained it, and took steps to recover from the mistake.

Business failure at the same time my daughter was born with a severe heart defect, she died 10 years later. Moved on by motivation to see her again someday when business would not consume precious time together.

I fail daily, even hourly. I try to embrace as many opportunities as possible, and maybe 5% of them work out. I move on by simply focusing on the next opportunity.

I failed to get a database project get accepted and implemented. I spent a couple of years on it, and it was demoralizing to have it dismissed. I gave myself a little time to be mad about it, then forced myself to find something else to work on that I cared about just as much. I actively sought out a new purpose.

Early in my career, I thought I was smarter than I was. I flew to a client's site on a Friday to upgrade a storage system over the weekend. Instead of waiting until Saturday morning to start, I dived right in. There were numerous issues and I ended up being there all night into the next day. All the issues were foreseeable had I just waited and discussed them the next morning prior to beginning. A 4-hour upgrade turned into a 48 hour rebuild and restore. I learned constant communication and teamwork will not prevent failure, but I've learned it can reduce its impact and help recover faster.

Part of being in IT is to learn from failures, hopefully more from others than your own ;-) - starting from my programming days, dealing with failures are a necessary part of IT, in fact, life... Also just know, no one is perfect; failure is not the issue, how one deals with failure is. There is always tomorrow to start over.

Firewall change when I brought customer's DC down. I tried to listen and learned from mistakes

I have failed a lot, but each time has helped me learn something new. One that seemed to happen more than any other was when I was speaking at a conference or seminar and someone calls out a question about something that I really don't know about my subject. I used to try to bluff it and guess at the answer and hope that everyone can just move on - but one time I was called out by an expert in the audience who made it clear that I didn't know what I was talking about - I was super embarrassed, but it was exactly what I needed.   I learned when I am teaching or presenting to be clear about what I know and don't apologize for what I don't know since nobody knows everything. The good thing is that each question I am asked that I am shaky on sparks my curiosity and I always want to find out later what the answer was - especially so I can share it the next time I present.

Live by the motto "life goes on". Pick up the pieces and learn from the mistakes.

I worked on an interconnection problem to a federal database which was crashing at the clients. We had no visibility to the federal side, and couldn't get visibility, so I had to troubleshoot completely one-sided. After finding several problems, bad equipment, nic bricks, half-duplex nic connections and layer 1 issues, I finally proved the real problem was not connectivity/network, it was an image problem on the workstations. The customer was disappointed that I didn't find an actual "network problem". A different team had to re-image the devices with a known working image, and that resolved the issue. While my guidance led the way and I was the lead, and felt I did a great job, they were confused about my methodology because they're not network analysts. I should have done a better job Setting Expectations. After several discussions to understanding better the process I gained back their trust.   Sometimes it's hard to be the analyst, and the person who has to also have the skills to explain everything at a level the customer can understand.

once I did a router upgrade without an electronic config backup but luckily had a paper one but had to retype the entire config. learned to always make a backup and never believe the vendor

I always study the reasons why failed and fix them., take responsibilities for failure. keep the motivation up for success. found inspirational advice from experienced people and Moved forward again, don't get stuck in mulling this situation over for too long.

I learn from all of my failures and turn them into success

My first try at getting a fulltime teaching job was the first time I presented to a hiring committee. Afterward, I sought out two members of the committee for help, and reviewed what I'd done to plan better, and practice. Second time, I got hired.

A failure is also an experience. File it for future reference and move on

Every failure had some connection to not understanding or agreeing with another person. The way to move on is to find ways to understand and agree.

Actually, I am right in that time, but looking forward, writing applications and pick up trends, by educational course- cyber security

Expect many failures during your career and realize that as long as you've learned from it, things will be ok. My most recent "favorite", was a terrific learning opportunity. I used the wrong feature in a new tool, which caused a push to all the client devices at one site and I didn't catch it right away. I called in reinforcements to help with the cleanup, advised the support team at the site so they understood what happened and what we could do to fix it, and made sure my management knew it was my fault. It all worked out to our benefit and we renamed the feature after me and trained new staff to not touch it. It's funny now and then I'm training new folks I tell them the story behind the nickname.

Many. Use it as a learning opportunity. Always is.

So many times that I have had a failure but the ones that ai remember is the ones that I learned. I have disconnected, cut pull the wrong cable, completely deleted all drive access, etc.

Oh my… I try not to focus on the failures, and just hold onto the lessons. I did, however, give a horrid keynote at a conference in 2018. It was a difficult year with the death of a loved one. I shouldn't have tried to put a smile on my face and do anything in front of a crowd at that time. I bombed big time and had to apologize to the conference promoter. I will never "push through" that level of emotional pain again. I will explain the situation and remove myself from a situation like that.

Run! Seriously, I love what I do but I wish packet analysis was not such a niche. Think about the growth possibilities in the field. Use the number of certification holders as a guide. Figure a way to merge what you love with what there is a need for - you'll be happier in your career.

focus on a few things, don't try to be a generalist.

Start earlier with study. I have to keep up against engineers that are working for 20 years in the IT and that means they have a lot more experience.   But my time will come.

Stay current. Stay open to new technology, keep looking for the next wave. Don't allow yourself to be pigeonholed.

Try to work out an ambitious and well-structured learning plan in order to get certified in networking and security.

I did not think Linux was a big deal. It is pay attention to it also try to pick up a programing language.

Forget about application programming and server installation. The programming languages change all the time requiring you to learn something new each time. The OS's also change all the time requiring you to learn something new each time. But the TCP/IP I used back in 1986 is still being used today... with quite a few new additions and modifications, but the basics are still the same as back in 1986!

more learning

Finish your degree on time, get certified, dream bigger and don't give up!

My IT career has been a jack-of-all-trades, master of none kind of thing. I would concentrate on one area I was really interested in and become an expert in that.

Strategy Planning

I'd tell myself to enjoy being in the position that I'm in, because it won't last long. Going up the career path, things don't seem to get better or worse, just different. More pay usually comes with more hours and more responsibility. Enjoy whatever it is that you're working on currently.

Learn programming

Be braver!

Whatever you decide. If it's the best option at that moment, then it will be the best option.

Work hard but work smart.

Finish school!

Do Not sweat the small stuff! When you are a young Engineer you believe that you can never fail. When the first time you hit a wall or have a failure it is scary, many just quit but good engineers and managers get up and try again and again. Zig Ziglar said "You can have everything in life you want, if you will just help other people get what they want." We all want success and acceptance - working together we can all succeed!

Learn how Microsoft Active Directory works, because it's really important knowledge in almost any security incident. Most attackers will try to gain Domain Admin rights and it's really helpful knowing how AD works and how to protect it.

Consistency is very crucial in career growth. Try to identify a mentor and discuss issues for career growth.

Never trust a Human Resources staff member. They cannot keep a secret and will almost always leak out info on a current cyber investigation to the person of interest.

Study python and learn python

Learn more networking skills. Incorporate responding to network/ cyber domains into your training programs.

Monetize earlier. Trust your gut. Go for the brass ring. Ask for more stock.

Start a company, don't take a job. And do it when you are young and single with no children. Also, since you are on a computer in 1993 using the internet, you should really start a company using the internet in 1993.

Start with the basics. It's easier that way. I jumped into forensics without mastering the basics of IT (i.e., A+, Net+, CISCO basics), and have had to backtrack. Trying to go too fast makes for a weak foundation that will eventually crumble or have to be repaired. Learn from my mistakes. Start at the beginning.

Writing software can be an individual sport but to be successful in the technology industry, it is a team sport. Technology is more than ones and zeros as all technology serves a purpose. I'd also advise myself that there is more money to be made in creating products than in providing services.

The world is full of problems to be solved. Spend more time on high impact projects...

I will do the same. Learning, learning and learning every single day.

Learn programming earlier, don't be afraid to take risks, don't settle for a mundane job you don't enjoy. Take care of people because relationships are everything.

Be more assertive and sell your vision (i.e., both business and practice area) to management. (Rather than wait for work to be assigned.)

Computers and Networking has become a large industry. Do what you love. Many network engineers have asked me to show them what I do to be a protocol analyst, but once they start to learn what it entails, most of them decided it wasn't for them. That's OK. Keep trying things, find what your niche is, and dive in to be the best. Don't stop learning and asking questions. Nobody knows it all.

shut up and listen, you don't know everything and never tell a client to 'calm down'

use the opportunities   always keep unique track with you   be focused on what you want   use senior/experts to grow yourself more & more don't be ignorant to keep communication channels within your industry

Don't waste time, be as effective and efficient as possible. Learn the technology beyond what anyone requires and do the things that you love within reason

I'd say to finish the degree the first time. Although - leaving school set me on the course that got me here today, and, today, degrees are far less important. I would tell myself that you are doing well, the mentors you found will be important, and the way you are diving deep into things, like when I studied with the chairs of the IEEE committees, and with the architect of the CSU videoconferencing system, will be important for the future, so keep at it. Apprenticeship and internship will be extremely valuable, so cultivate those.

Pointless: each phase of our lifetime successfully protects itself from any future experience with a wall of ignorance.

As you work to know more and more, embrace the things you don't know and let them guide you. You can't see the whole path from the start.

IT Technology is like fashion, today it's a need tomorrow is old fashioned.

Switch to Pre-Med.

Keep life balance

There is always more to learn, and always someone that knows that more than you, until you decide to become the person to go on a specific area.

Try harder in that coding class! I took a coding class at Novell and thought it would be funny to do "Hell World," instead of "Hello World." I got kicked out of the class. Sigh. Someday I'd like to work on coding classes again.

This is an exciting time in our industry. If you like to learn, you are in the right place. Be comfortable teaching others, you will have many more opportunities available to you. Don't think you have to have all the answers, there is usually someone smarter in the room. Be comfortable in praising others on your team.

Have fun with the conference. Enjoy all the information and thanks all for hosting it.

Get as many certifications as you can as early as you can. Stay current with the most important. Keep learning.

- Try to get informed about your profession as much as possible. Internet is a good source. - Follow courses. - Go to trade fairs.

Always have an open mind. Don't put yourself in the field if you think you can go to school for 2 years then not pick up a book after it. Be honest about your capabilities, don't say you know how to troubleshoot items when you never touched them before. Get a solid foundation on networking and the way computers work.

RPA, AI and web-based services seems to be the wave of the future. But AI is probably the most misunderstood technology around. The AI instructor must instruct the computer properly from the get-go or else it won't do what you want it to do. Repetitive tasks like teaching robots to do the same thing over and over in a factory is easy. But trying to teach a computer to think on its own and come up with a reliable and safe response can take upwards of 8 months to over 3 years... and that's if done properly. If you teach it wrong from the get to... then you go back to square one and repeat the next 8 months to 3 years hopefully teaching, it the right way this time.

We have an important role in the world. Physical security and Digital security are one and the same. It is up to us to ensure our organizations, communities and families are safe in the digital world like the physical world. Together, we can make a positive difference in the world.

I got into IT because I needed a better paying job. After 30 years, I can't wait to retire. Find something you enjoy doing and go for it. You'll still work hard, but you'll be a lot happier every day. If that's IT, then it can be a great career.

The Operational Trends, Sourcing Trends, access, visibility what additional point for discuss?

Despite the changes in the industry, fundamental knowledge and understanding such as tcp/ip, packets, subnets, processors, memory allocation, disk speeds, cryptography, wireless, security and isolation, still go a long way. And issues related to these concepts seem to come up over and over again in new forms. Tinker. Have fun. Learn. The world isn't getting less technical.

I am looking forward to better understand what is currently taking place in the world that are threats how to deal with them, how to use existing tools and learn about new tools and use them correctly. Also brush up on current skills

Focus on your strengths and your interests. There will always be some days when work isn't just "work". But if there are some days when there are no clear borders between hobby and job anymore, you'll discover your motivation and your productivity will raise enormously.

Preparing for your future should not be taken lightly. It requires a lot of serious thought and planning. Don't go looking for short cuts, there aren't any

"If people like you, they'll listen to you, but if they trust you, they'll do business with you." (Zig Ziglar) -We may be in the network business but remember we are always in the people business!   -Learn to research and read, always be learning and always be encouraging to those around you.   -Always move forward and try to avoid the unmotivated and overly motivated people. I am in my 70's and I still read hundreds of pages monthly and I still reach out to my technical friends and discuss the latest attack, fix, standard...etc. -Embrace every difficulty or problem as a learning step! -Take time to learn about the tools you use, test them and learn their limits.   -In networking sometimes just unplugging the system will solve your problems, at least until you plug back in.

Stay curious, and experiment with technology as much as you can. Don't try to gain knowledge by asking others about everything without having invested in the basics yourself first. Mentors are often willing to help if they can tell that you got stuck after trying to find out yourself, but they won't if it seems that you're trying to take the easy way without putting in the work first.

The world is projecting towards data science, artificial intelligence, machine learning, cloud computing, and smart workplace. Research or career growth plans should focus on these directions so as to build a futuristic career engagement.

Always assume that the bad guy is a lot SMARTER than you, especially when dealing with new technology.

There is no such thing as a problem, only solutions. Many will always find problems, only a few can focus on a solution.

The more skill sets you develop, the more value you bring to bear in a job or any mission.

Learn theory, test theory, use theory. Do not "upgrade, reboot, or replace" to solve problems.

Always be learning. New technology comes along almost daily, you need a basic understanding of what is out there, and the ability to recognize when a new technology is so good that your company should embrace it. When that happens, take a weekend and learn how to be a programmer in the new tech, before assigning work to your development team.

Get comfortable with being uncomfortable. I received this advice from the instructor of my first programming class, and it resonated with me. If it's easy, you aren't learning. Most of the time when things are easy, it's because you already know how to do them. It is when you are struggling, when you are uncomfortable, when you are frustrated, that you are learning. So, get excited when it's hard. It means you're getting better.

Technology is a big jigsaw puzzle. Don't force the pieces but also don't be afraid to create your own replacements sometimes. A former mentor used to yell at me to "take my head out of the monitor" which was his way of saying don't lose the forest for sake of a tree. It's been easy to focus on the task at hand but always remember that overall object and results you are shooting for.

I believe existing IT fundamental technologies are right for a HUGE disruption - for the better. Pay attention; some impossibilities may become realities and soon.

Cyber security is a hot topic, try to learn as much as you can. And do not try to be expert for one single technology, that area is history. More you know, better for you.

Hello packet people!!   Look, our industry can get pretty cold. It's full of wires, electrons and blinky lights. Don't let it be. Find mentors and thankfully soak up all you can. Be grateful that they took the time on you. When you learn something, immediately look for a way to share it, to be someone else's mentor. In this industry, there will always be someone more experienced than you and someone less experienced. Don't do the "My knowledge makes me important, so I don't want to share it" thing. That will only bite you in the end and it's just not cool.   Find a niche that you enjoy and master it, but don't be afraid to make mistakes and fall on your face. Stay as current as you can, but don't let that thought overwhelm you, since you can't stay 100% current on everything. And last but not least - if you are not having fun, change something! There is far too much to do in this industry to be bored or stagnant or to work with people you don't enjoy.

Be proactive to connect and reach out to experts and practitioners in the field. While it may sound like another cliché, but the importance of networking and professional connections is invaluable to one's career.

If you're looking for training, and think Protocol Analysis is your passion, there is NOBODY better at training than Chappell University.   I have been in several of Laura's' classes over the years, she is hands down the best in the world. If you need literature, the books she has written are concise, well-written, with examples, explanations, and even have some humor sprinkled in. All the best to you and have fun!

worked at a back where they outsourced and insourced the IT staff twice. doesn't matter if you are let go or outsourced, always stay focused on what you like to do, and the rest will follow

I would say that keep up to date with upcoming technologies that will help to remain in security industry. do not limit yourself with certain area, learn new things whenever have time, try new things.

Follow you heart and gut feeling, do the things that excite you, always be extremely kind and courteous to everyone.

Make lots of friends and connections online, both serious and silly. Learn to ask good questions, and ask them all over - in forums, and of your mentors, friends and co-workers. And, give good answers when you can - the group mind we create and maintain is important. Keep a good database of information yourself. That process will help you organize and clarify your mind, your thoughts and your writing. It's not just all Google - that does not do well for your thinking.

Periods of harmony and conflict are equally natural to humans. Of the two harmony being the time for parasites to flourish

When applied well, technology is really good at answering questions. Make sure you are asking the right questions. You won't produce a good answer to a bad question.

Is computing the only world? Or are you also capable to do with your hands, mind and social environment?

I'll give you the same advice my professors gave us. You're entering a field of continual learning. Keep your skills current (and be prepared to shell out some significant money to do so) and stay marketable. It is also on par with doctors for stress levels and divorce rates; it's the nature if the work. And finally, realize you will be working with a wide variety of people from a variety of backgrounds and cultures. Leave your biases at the door.

Always hire the best help. It makes you look good

Give it time, and always listen when someone is trying to help you. respect and be humble about your wins.

Stay positive. Sometimes the ever-changing tech industry seems overwhelming. Spend a little bit of time each day learning something new.