

Telecommunications Systems Management Alumni Spotlight

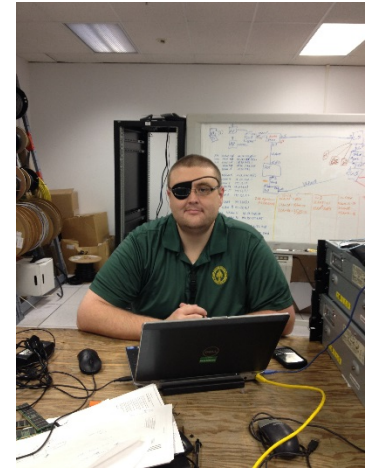
Name: James (Jimmy) Copeland

MSU Degree: B.S. TSM 2008
Options: Security and System Administration

Home Town: Cadiz, KY (One of the greatest little towns ever)

Current Town: Great Mills, MD

Current Job: Senior Network Specialist at Smartronix



Current Job Description: I do a little of this and a little of that. Biggest role is maintaining my customer's satisfaction. I help to plan, build, test, and document networks for all of the SOF components and TSOCs, including USSOCOM, USASOC, AFSOC, and others. This involves engaging all types of government agencies and being able to quickly understand customer expectations and their environment. I have put in wireless, tested advanced encryption with Suite B, installed a datacenter, and run fiber circuits for connectivity. I do build estimates as well and always look for a way to help my customer save money but yet make them look amazing to their customer. All of this is done under the direction of my customer at the Special Communications Requirements Division at NAVAIR.

Previous Jobs held (since graduation): I started out doing IA work for Dynetics in Huntsville as a Computer Specialist II where I would help analyze systems for MDA as an independent party to show whether or not systems were set up according to requirements for security. After that I was an Intermediate Network Engineer at SAIC for NASA supporting manned space flight and counter-intelligence and counter-terrorism. Following that I went to Scott Air Force Base as a Cisco Network Engineer/Senior Consultant for Booz Allen Hamilton where I was the main network engineer for implementing 802.1X and doing switch upgrades and replacements for the entire base. I left there to go back to Huntsville as an Information Systems Security Engineer for System High Corporation again for MDA, where I helped to maintain systems and do IA paperwork for very specific systems. I left there to join Smartronix in Stafford, VA, as a Network Security Engineer II. There I engineered new network management deployments and helped with network engineering solutions. In my free time, I have also been an Independent Contractor for Logic Method IT, where I helped to document backup procedures using AWS, and an Independent Contractor to ICA that allowed me to write questions that are being used in the new versions of the CCDA, CCDP, and CCNP ROUTE and SWITCH tests for Cisco.

Family & Personal: So about me. That one is tough. I am married to one heck of a lady. She has put up with me for over 10 year (June 2003) and has moved all over the place with me. Wendy is also a grad of MSU and while we didn't meet there, it will always be our place. I love to cook and read. Cooking though being my main passion outside of my wife and IT. I also love to learn. I believe in the old adage of "the day we stop learning is the day we die" (Michael Scott, *Warlock* and no that is not the Michael Scott from the Office). But this adage is what

causes me to always find something to learn, whether it is a new recipe, a new algorithm, or a new protocol.

TSM Q & A:

What did you do for your internship and how did it benefit you?

I did one official internship and one unofficial. My official one was in the CyberCave over a summer. It was John Hart and Marcia Combs leading it with Tony Jones, Corey Salata, Jamie Miller (now Salata), and myself helping high schoolers to learn and have fun. We had a blast showing them what TSM was all about.

My unofficial internship was with Hawkins Research in Murray. I was a network tech for them and helped to maintain their network as well and implement network monitoring. CyberCave gave me the perspective of how to show others my passion and HRI showed me how to apply my passion to a corporate network. Both were great and to this day I still use those principles in all that I do. Combine them both with my time as a lab research assistant and well, let's just say that I remember those times with great fondness.

Since graduation, what is the most exciting thing you have been able to experience in your work? Most exciting. Well there has been a lot. I have gotten to go to Okinawa twice and Hawaii once for trips and once was back to back. I have helped gotten networks going in unlikely places that made people just go "WOW!!" I have broken into places when pen-testing that made me thankful for my get-out-of-jail-free card (paperwork that allowed me to do it). For me though, the most exciting aspect is knowing that what I do supports the warfighter in one form or fashion. Most people don't get to say that they understand why they do what they do but I have seen firsthand how some of my stuff has benefited people and kept some people alive so how do you beat that? Second to that is watching one of the last space shuttle launches as a VIP at Kennedy knowing that two months before that I was in Houston installing a network to provide them better and safer communication capabilities.

What class(es) were the most beneficial to your career so far? What classes weren't? I know this is going to sound like a marketing line but it is not. All of my classes have been beneficial to me. Everything from Humanities (making intelligent conversation) to the Business classes (making MELs and business cases) to all of my TSM classes (adapt to new environments quickly, learn new protocols, and integrate new technologies into their current networks). And let's not forget the class that everyone despises but still is a great asset to everyone and that is George Rice's CIS 304 for learning to manage customer expectations and requirements. And my TSM classes are not just beneficial to my everyday working life but also my personal life as well. I am currently studying for my CCIE R&S and without the foundation that I had gotten from all of my TSM classes, I would have an even harder time understanding the advanced concepts and network integrations that it requires.

I do wish though that I had done one class that would have helped with lab reports, writing assignments, and professional reports out of class. That would be technical writing. That one topic has caused me more pain than most anything else and I wish I had taken more time to learn it properly. Whether you are writing a report about a pen-test operation or an IA package or a note to the boss, you must be clear in your writing and I have realize that a technical writing class would have helped me beyond measure.

What activities outside your classwork were most valuable to your career? The most valuable activity that I can think of was being a member of ATSM. I started as a member, then moved up to VP and finally President. It helped me to break out of my shyness and gave me the ability to talk with others. I know that some people will be shocked with that confession but it is true. I am shy person by nature. Networking and talking has helped me immensely in learning to know more about a problem as well as other perks. This also helps in networking so that you have a group of buds/friends to call on in the case you need help remembering something or in case your contract is up and you need a new position. Combine that with being able to go to ITERA as a part of ATSM and that was a blast. Loved every minute of being in the group.

Other thing was being a part of the research project with Dr. Bowman. It started as an independent study project which then took off as just research and then into a paper that we presented at ITERA. It was setting up a HoneyNet on the school network. It required cooperation from the campus IT department and also from the TSM program as well as CSIS. That was a great time as well because I got to see network threats that were present as well as see different attacks and then present my findings to ITERA. One other activity was being an IET Ambassador. It allowed me to interact and meet people from all over and help show them what TSM was about and answer any questions they had. It also gave the ability to talk with people from other majors within the department and helped me to branch out and see what they are doing. Again, the whole networking and talking thing.

What is one piece of advice that you would give to current or future TSM students? Got a few really. One is talk to your professors and other students. Professors are great to get to know personally and they have this thing called knowledge that is great to get to know as well. Plus they can be fun to hang with outside of the university for a beer (I have stories about that). Other students because it goes back to the networking that I already mentioned but also because when you sit in class and can't figure out a problem, it is always great to bounce an idea of someone else. Plus they are good to drink beer with after a tough lab report or test.

Next piece of advice is never to stop learning. The reason I like network and information security so much is that there is always someone out there smarter than you so you have to become smarter to learn about them and counter them. Not smarter than them but smarter than you are.

Third is get involved. Because I got involved I became a lab assistant, an IET Ambassador, a tutor, and I made memories and friends at MSU and within TSM that last to this day. I got to go to Vegas, Louisville, and Nashville for ITERA. Combine that with my involvement in ATSM and again I have memories like you wouldn't believe. Great times.

Lastly, do what makes you happy. That can be networking, programming, managing, or even running a business but it doesn't matter. You have to live with the choices you make so be happy while you do it. That is why I do what I do now. I get to travel. I get to meet new people. I get to do networking (computer and people). I also get to keep learning.

For more information on Murray State University's Telecommunication Systems Management Program visit us on the web at www.murraystate.edu/tsm, on Twitter at [@MurraystateTSM](https://twitter.com/MurraystateTSM) or on Facebook at <http://www.facebook.com/MurrayStateTSM> or call us at 270.809.3987.