

## Interview with Dr. Coffman

**MH:** My name is Mike Haynes, and I am here with Professor Henry Coffman of Lord Fairfax Community College. We're here to talk about cybersecurity and more importantly the Cybersecurity program here at LFCC. But first I'd like to talk with Professor Coffman about his background in cybersecurity. You have two degrees, one from American University and one from George Mason University. Could you give us some more detail about those degrees?

**Coffman:** Well, I received a Master's of Science degree in Technology Management from American University in 1980. Actually, my major was in Operations Research, which is basically mathematical optimization where you actually looked at a business problem and determined for the minimal amount of cost what the maximum amount of things you could get to get the maximum amount of profit out of that whether it be chairs or widgets or numbers or something like that. I graduated from George Mason University in 2007 with a Doctorate of Community College education. My concentration in that field actually is Information System Security, which is further enhanced by a graduate certificate in that field from George Mason University at the same time. Basically, that's what I have.

**MH:** Ok, you have what I like to refer to as real world experience in the field of cybersecurity. In your bio, it states that you worked for Interpol. What were your duties while there?

**Coffman:** Well, I actually had two positions within Interpol. It was eight years I was there. The first few years, give or take about three or four, I was actually a computer systems analyst. I was in charge of technical support as well as contract liaison with the entire computer system at the United States National Central Bureau, which was basically a component of Interpol. From there I moved into the Chief Information Officer position, CIO, around three years after, so about 1999 or so, and from that position, I managed a number of staff, and I was actually in control of everything in the IT information world from the USNCB standpoint,

which was the United States entry point with Interpol. I supported the communications systems, which were linked from the Interpol headquarters in France plus the links to all fifty states in the United States. That included not only the technology side of it, but it included the security side of it including encryption schemes, any documents such as security policies had to be written, etc., etc., and along the line. The last thing that I would like to add to this is during the time of 2000-2004, I was the vice-chairman of the Interpol technology committee. They actually had a formal name called SCID, of which actually consists of 181 countries as membership, and within that committee, we handled the technology, security, and anything related to that that interfaced with all 181 countries.

**MH:** Impressive. After you left Interpol, you came here to LFCC, but your job description here has actually changed over the years. Can you give us more detail about that?

**Coffman:** Well, I came here in August of 2004 as an assistant professor of Information Systems Technology. I was mainly responsible for doing the network engineering side of the house during a couple of years, from about 2004 to 2006. Of course that really entailed teaching discipline. I was, well I applied for and received a position in information systems security as the information security analyst or officer here at Lord Fairfax Community College in 2007 or so. I started doing a BIA, which was the Business Impact Analysis looking into functions in hopes of designing a new risk management plan to look at our threats and how to account for the threats. Within two months of starting that project I was moved more or less, moved to become head of Information, or I guess, its Technology Services division. So I was the director of Technology Services division where I now was in charge of maintaining the staff, the equipment, and the networks including security features, everything for the entire campuses for Lord Fairfax Community College.

**MH:** All three campuses?

**Coffman:** All three, all three. So for those who, you know, do not know Lord Fairfax very well, we have a Middletown campus, a Fauquier campus, and a Page

County center. But anyway, I was in charge of all of those. Around 2009, I returned to faculty position. I decided to do that on my own. Once upon return, I again became the focal point for the networking engineering courses, but I revived, and I have to use the term revived because the cybersecurity used to be called network security was disbanded, if you will, after I left. So I reinstated it under the new name, cybersecurity which is more appropriate in today's world. So I became the focal point of that one as well and hence, that's where I am at this time.

**MH:** Okay, well I am sure you would agree that a well-trained cybersecurity professional needs to stay abreast of changes in technology and methods of attack to infiltrate a system. As an instructor, you also need to remain conscious of all these changes for your lectures. What media, and when I mean media, papers, articles, magazines do you read that you would recommend to the young cybersecurity professional today?

**Coffman:** Well I guess the bottom line is if I had to recommend something, find time to do things, okay, because that is one of my most difficult goals trying to achieve. I would say in reference to that, I keep up with things as much as possible reading a lot of textbooks because not only for preparation for classes but also due to different revisions, different changes happen in the world, and you get a lot of knowledge just by reading the textbooks and seeing what happens in the new world or in today's world I guess I should say. In addition to that, I receive publications, most of them electronic nowadays, information security magazines, things from Tech Republic, which actually has a number of security articles in it, and peruse those, not necessarily that I read every one of them, but if there is something that is, highlights, or really catches my attention, I'll take a look at that. I'll also use a source that a number of students actually walk in and give me copies of articles, and I keep up with that by taking a look at that and say oh this is interesting and come up with some kind of a response in relation to that. The last thing that I'll say in keeping up with the state of the art is that LFCC is a member of an organization called Cyberwatch. Cyberwatch is a consortium, if you will, of various universities, colleges, and public/private businesses, including DHS and NSA that give out, distribute information of what is happening in the

world of security. There is probably close to two to three hundred members. Of that, I am the focal point for that, whether POC (point of contact), whichever way you want to say. So I look at some of their information that comes out, you can find training, you can things or articles about the latest stuff. There's other places like SANS. Now as far as recommendation, in any subject matter discipline, but especially in cybersecurity, you need to keep up with the changing environment, and that is because if you don't, I am going to say this, the hackers will. Okay, so you need to understand the mechanisms of encryption, what a policy is, what risk management is, how to look at risk, how to account for those risks, those are all things you need to keep abreast of.