

New Director Enhances Training to Fight Information Security Threats

Federal Reserve chair Ben Bernanke's recent revelation that he'd been a victim of identity theft attracted national attention. But he's far from alone in having his personal and financial data compromised. Every year, thousands of companies and millions of individuals are victims of cyber attacks, including identity theft, computer viruses, hacker break-ins, and electronic fraud. Themis Papageorge, the new director of Northeastern's Master of Science in Information Assurance program and an associate clinical professor at the College of Computer and Information Science, can cite the statistics: A single person was caught with 130 million stolen credit card numbers. The financial impact of this case alone was more than \$100 million. The median loss from a single instance of identity theft is \$31,000.

"The economic impact, let alone the social impact, is tremendous," says Papageorge, who notes that information security breaches to the U.S. electrical grid and NASA's computer system also have been reported. "The trend has accelerated; we need trained professionals to stop it."

Papageorge joined the College of Computer and Information Science to help prepare these professionals. Most recently a vice president with Guardium, a market leader in real-time database security and monitoring, Papageorge has been involved with information assurance for the past decade. He brings a total of twenty-five years of corporate experience in technology, planning, and process and system redesign to his new position at Northeastern. Papageorge also focused on risk management in earning his PhD at MIT.

"My greatest satisfaction is enabling organizations to bring technology and technological solutions to bear on these very important issues and to train people to do so," says Papageorge. "This was the natural next step for me. It's an excellent

fit because I bring the view of what the major corporations in industry need."

The same qualities that draw graduate students to the program also attracted Papageorge. He lists the program's interdisciplinary nature and faculty, as well as Northeastern's designation as a National Security Agency Center of Excellence in both information assurance education and research, among the appeals of his new position.

Themis Papageorge, director of the Master of Science in Information Assurance program



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Now, Papageorge is increasing the program's advantages by revising the curriculum, adding courses, and developing a new industry and government partnership that will bring decision-makers to Northeastern each year to discuss cyber threats and the state of the field. He's also getting ready to launch an online version of the master's degree program in January 2010 (see page 4).

Among the new courses already underway is Introduction to Cyberspace Technology and Applications, which prepares students without technology backgrounds to understand and use computers as a professional tool. Other new courses include Security Risk Management and Assessment, which Papageorge is teaching this fall.

Existing courses are getting fresh content. Papageorge explains, "In every course, there are additional topics and points of view."

The information assurance program continues to incorporate relevant knowledge and elective courses from other fields, including the social sciences, law, criminology, and management. Students take courses from both technical and contextual tracks. They also can customize the program to meet their company's needs and their own professional goals.

"Right now, demand for trained professionals is high, and it will get higher. We're addressing the needs of industry as they evolve," says Papageorge. "Most companies have good IT people, but this is an interdisciplinary activity. You have to have the technical knowledge, but you also need to know the context and how to make decisions in that context." ■