



# NATIONAL UNIVERSITY

## **National University Students Partner with Small Businesses and Nonprofits to Strengthen Cybersecurity**

**San Diego, Calif. – Dec. 5, 2016** – Addressing a growing need to help small businesses and nonprofits better secure their data, National University is expanding a program that pairs student teams from its Master of Science in Cyber Security and Information Assurance (MSCSIA) with organizations that may not have the resources to undergo a typical cybersecurity audit.

The unique community service project fulfills a program requirement for graduate-level students to conduct a capstone project to put into practice concepts and approaches learned throughout the program. The cybersecurity audit project also aligns with the university's mission to give back to the communities it serves For the Greater by opening up opportunities for students to give back to the community.

“Projects like these help to prepare well-rounded graduates who enter the workplace or advance with a combination of academic knowledge and practical know how. It helps them to excel as professionals, and also as community citizens,” said Dr. John Cicero, dean of the University's School of Engineering and Computing.

Companies that agree to participate in the free cybersecurity audits also benefit from working with a high-caliber program. National University is recognized by the National Security Agency and Department of Homeland Security as a Center of Academic Excellence in Information Assurance for its cyber security program – one of just six designated centers in California and the first and only one in San Diego County. The prestigious designation recognizes quality academic programs that prepare professionals to reduce cyber vulnerabilities in the nation's networks.

The project developed as school leadership noticed a growing need to address cybersecurity protection for nonprofits and small businesses. According to a 2016 report by Keeper Security and the Ponemon Institute, 50 percent of the small to medium-sized businesses they surveyed have had their data breached within the past 12 months. However, often times these companies and organizations are too small to keep a full-time cyber security expert on staff, and may not have resources to pay for a cybersecurity audit, according to National University Professor Christopher Simpson, who serves as lead faculty for the MSCSIA program.

Professor Simpson worked with Dr. Cicero to create the community service program that pairs vulnerable companies with teams of MSCSIA students who are close to graduating and who have gained experience exploring cybersecurity vulnerabilities through the program's simulated

cybersecurity attack exercises. The students, whose work is overseen by program faculty, provide comprehensive audit reports over the course of several months as part of capstone graduation projects, helping companies save thousands of dollars. “In turn, our students are able to apply a culmination of everything they’ve learned in class in a real-world setting,” said Professor Simpson.

Acting as analysts and consultants, the MSCSIA students will typically discover an abundance of “open source intelligence,” a term for publicly available information on companies that could potentially put them at risk, along with shared user IDs, open wireless networks and easily accessible customer data – often on computers that, should they be disabled or compromised, could close down an entire business.

Professor Simpson said these are often the first and easiest problems to identify and solve, but doing so can make a major difference in combating data breaches and activities such as phishing - the act of defrauding a company or individual into revealing proprietary financial information by posing as a legitimate company or client.

Jonathan Sowell, a student in National University’s MSCSIA program, recently worked on a cybersecurity audit with a team that included five other classmates. He said National University’s cybersecurity program’s combination of theoretical learning, virtual practice and the capstone project made for a well-rounded experience, allowing him to hone his skills in communications, teamwork, client interface and even report-writing and presentation technology.

Sowell was also able to see the positive impact of their work. Sowell’s team prepared a 378-page report for their client and delivered a three-hour executive debrief to leaders within the company they were partnered with. As a result, the company ended up encrypting its credit card data and changed the entire architecture of its computer system. “That company walked away with a wealth of knowledge from our assessment, along with a heightened awareness that will continue to benefit them for a long time to come,” he said.

### **About National University**

Founded in 1971, National University is one of the largest private, nonprofit universities in California. With more than 150,000 alumni, National University is the flagship institution of the National University System. National University is dedicated to making lifelong learning opportunities accessible, challenging and relevant to a diverse population of students. Four schools and two colleges – the College of Letters and Sciences; the Sanford College of Education; the School of Business and Management; the School of Engineering and Computing; the School of Health and Human Services; and the School of Professional Studies – offer more than 100 graduate and undergraduate degrees and 13 teacher credentials and licenses. Programs are offered at locations throughout California and across the nation, and are also available online. National University is headquartered in La Jolla, California. <http://www.nu.edu/>