Georgia Tech warns of threats to cloud data storage, mobile devices in latest 'emerging cyber threat'

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As more businesses find their way into the cloud, few engage in security measures beyond those provided by the associated cloud storage firm, a new report from Georgia Tech notes. Even fewer seek heightened data protection because of concerns that usability and access to remote data would be significantly reduced.

These concerns are among findings made by the Georgia Tech Information Security Center (GTISC) and the Georgia Tech Research Institute (GTRI) in today's release of the Georgia Tech Emerging Cyber Threats Report for 2014. The report was released at the annual Georgia Tech Cyber Security Summit, a gathering of industry and academic leaders who have distinguished themselves in the field of cyber security.

"With recent revelations of data collection by the federal government, we will continue to see a focus on cloud security," said Wenke Lee, director of GTISC. "But encryption in the cloud often impacts data accessibility and processing speed. So we are likely to see increased debate about the tradeoffs between security, functionality and efficiency."

Encryption challenges were a focus at this year's summit, which featured some of the nation's top information security experts. These included keynote speaker Martin Hellman, professor emeritus at Stanford University and one of the inventors of public key cryptography, a way of

securing communications without relying on pre-shared secrets.

In related findings, the report reveals security issues involving the "Internet of Things," referring to the notion that the increase of Internet-capable devices could create opportunities remote hacking and data leakage. With everything from home automation to smartphones and other personal devices becoming connected to the Internet, these devices will capture more real-world information and could permit outside parties, companies, and governments to misuse that information.

In the mobile space, even though designers of mobile devices and tablets have developed a robust ecosystem to prevent large-scale device compromises, the report finds that the threat of malicious and potentially targeted use remains. Earlier this year, researchers at Georgia Tech reported that they found ways to bypass the vetting process of Apple's App Store and subsequently showed how malicious USB chargers can be used to infect Apple iOS devices.

"No matter how successful we have been, black hat operatives will continue to attack infrastructure at every angle possible, making cyber security a global issue for years to come," said Bo Rotoloni, director of GTRI's Cyber Technology and Information Security Laboratory (CTISL). "We must remain vigilant. The purpose of this Summit and Report is to raise awareness, create educational opportunities and maintain an ongoing dialogue among industry, academia and government."

The Georgia Tech Cyber Security Summit is a forum for the IT security ecosystem to gather together, discuss and debate the evolving nature of cyber threats, and to chart the course for creating collaborative solutions.

In addition to Hellman's keynote address, the 2013 Summit included a panel of security experts from Microsoft, Splunk, Dell Secureworks,

Solera Networks and Georgia Tech.

More information: The report will be available for download at gtsecuritysummit.com

Provided by Georgia Institute of Technology

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