UNIVERSITY OF SOUTH FLORIDA

Major Research Area Paper Presentation

Cybersecurity Vulnerabilities in Mobile Fare Payment Applications by Kevin Dennis

For the Ph.D. degree in Computer Science and Engineering

Mobile fare payment applications are becoming increasingly commonplace in the public transportation. Few public agencies or supporting vendors have policies or established processes in place to receive vulnerability reports or patch vulnerabilities discovered in their technologies. This research presents a vulnerability discovered in a mobile fare payment application that may have affected customers in as many as 40 cities across the United States – an estimated 1,554,000 users. Lessons learned from the vulnerability disclosure process followed by the research team as well as recommendations for public agencies seeking to improve the security of these types of applications are also discussed.

> Thursday, April 29th, 2021 12:30 PM Online (Collaborate Ultra) Please email kevindennis@usf.edu for more information

The Public is Invited

<u>Examining Committee</u> Jay Ligatti, Ph.D., Major Professor Xinming Ou, Ph.D. Sriram Chellappan, Ph.D. Sean Barbeau, Ph.D. Nathan Fisk, Ph.D.

Xinming Ou, Ph.D. Associate Chair for Graduate Affairs Computer Science and Engineering College of Engineering Sudeep Sarkar, Ph.D. Department Chair Computer Science and Engineering College of Engineering

Disability Accommodations:

If you require a reasonable accommodation to participate, please contact the Office of Diversity & Equal Opportunity at 813-974-4373 at least five (5) working days prior to the event.