Panel: CICI Regional Collaboration Projects – Impact and Tales of Transition to Practice

CC* and CICI PI Workshop
September 25, 2018

CICI: Regional: Southeast SciEntific Cybersecurity for University REsearch
(“SoutheastSECURE”)

Dr. Jill Gemmil
Clemson University
jbg@clemson.edu

Dr. Tony Skjellum
The University of Tennessee at Chattanooga
Tony-Skjellum@utc.edu

Veronical Gadsden
Voorhees College
vgadsden@voorhees.edu

Dr. Sara Graves
The University of Alabama in Huntsville
sgraves@uah.edu

CLEMSON UNIVERSITY
THE UNIVERSITY OF ALABAMA IN HUNTSVILLE
THE UNIVERSITY OF TENNESSEE CHATTANOOGA
VOORHEES COLLEGE
SoutheastSECURE Overview

- Coalition of four universities in the Southeast US
- Objective: Cybersecurity awareness in “Higher ED”, specifically NSF
  - Increase researcher cybersecurity awareness
  - Increase researcher cybersecurity skills
  - Investigate researcher attitudes and beliefs towards cybersecurity
  - Develop tools for automated scanning
  - Develop appliances for automated scanning
  - Provide on-campus and virtual cyber security training for researchers
  - Facilitate communication between researchers and campus IT/security
SoutheastSECURE: Survey Findings

- NSF-funded researchers across the southeast US were sent a survey regarding cyber security
  - University researchers listed as a PI on an active NSF award
- Noteworthy findings:
  - 34% of respondents reported maintaining their own security; 4% reported “no regular maintenance”
  - 39% of respondents reported their projects had no security requirements, or that they created their own requirements.
    - Another ~19% reported they were not sure
  - 35% report writing their own software without secure coding practices
    - 1.5% reported security incidents resulting from custom software
SoutheastSECURE: Outreach and Awareness

- SoutheastSECURE has developed a tool suite for NSF-researchers
  - Website vulnerability scanner
  - Locally based network vulnerability scanner
- SoutheastSECURE has developed training materials
  - Short videos to increase security awareness
  - Training modules to provide focused security training
- SoutheastSECURE has held cyber-security workshops
  - Campus-wide workshops
  - Targeted at researchers
SoutheastSECURE: Future Plans

- SoutheastSECURE surveys have identified needs in cyber security
- Research requirements and cyber infrastructure are not always coordinated
  - Researchers being responsible for cyber infrastructure may increase cyber risks
- Investigate additional training & tools to address current research findings:
  - To help campus IT support unique research projects
  - To help researchers with project cyber needs that cannot be met by normal campus IT
  - To help researchers manage cyber risk
  - To help researchers cope with increasing cyber requirements
  - To help researchers cope with other cyber challenges
    - Ex: Data backup and provenance