

## The University of South Florida presents



https://idscbigdata.com/

## **Interdisciplinary Data Sciences Consortium**

September 11, 2018 2:00-3:00pm Location: CUTR 202

Featuring Dr. Zhuo Lu Electrical Engineering, USF

## Title: INFERENCE INTEGRITY IN NETWORK SECURITY

Abstract: Network inference has become a vital mechanism to infer information from a network. In this talk, we briefly introduce our recent research results in the broad areas of proactive and deceptive network security. We will focus on two aspects of security problems in network inference. The first part of the talk is about understanding how proactive network strategies can be used to prevent malicious network inference from obtaining important flow information in wireless networks. The second part of the talk is to introduce measurement integrity attacks that can manipulate the network tomography process and provide deceptive results to network operators.

To learn more, visit: <a href="http://csa.eng.usf.edu/">http://csa.eng.usf.edu/</a>



<u>Biography:</u> Dr. Zhuo Lu is an Assistant Professor in Department of Electrical Engineering, University of South Florida. He is also affiliated with the Florida Center for Cybersecurity and by courtesy with Department of Computer Science and Engineering. He currently leads the Communications, Security, and Analytics (CSA) Lab at University of

South Florida. His research has been supported by NSF, ARO, ONR, DOE and Florida Center for Cybersecurity.

Dr. Lu received his Ph.D. degree from North Carolina State University in 2013. Dr. Lu's research has also been centrally focused on modeling and analytical perspectives on communication, network, and security. His recent research is equally focused on practical and system perspectives on networking and security. He is a member of ACM, IEEE and USENIX.

<u>IDSC Contact:</u> Dr. K. Ramachandran University of South Florida 4202 E Fowler Ave, CMC317 Tampa, FL 33620-5700

E-mail: ram@usf.edu Telephone: (813)-974-1270