



TOPIC	Cyber-Physical Systems, Smart Grids and Dynamic State Estimation
ORGANIZERS	Student Leadership Council and Faculty of TECHLAV
SPEAKER	Ahmad Taha, Ph.D., Assistant Professor, ECE - UTSA
DATE	Friday November 6 th , 2015
TIME	3:00-4:00 EST
VENUE	IRC 410, North Carolina A&T State University, UTSA and SIPI are joining through video-conferencing
FEES	No Charge

SYNOPSIS

Smart power grids, robots, UAVs, transportation networks, wearable devices, and the phone/tablet/computer you are currently reading from, are all ubiquitous cyber-physical systems (CPS). These inherently uncertain systems combine physical phenomena with communication, data processing, control, and optimization. Existing studies have addressed a breadth of challenges related to the design of CPSs. In this presentation, the speaker will discuss the concurrent evolution of CPSs, highlighting the major research areas in CPSs. The speaker will also present a summary of his research interests and succinctly present his recent work on dynamic state estimation for CPSs and smart grids — an essential component for safe, resilient CPSs.

ABOUT THE SPEAKER



Ahmad F. Taha earned the bachelor's degree in Electrical and Computer Engineering from the American University of Beirut (AUB) in June, 2011. In August 2015, he received his Ph.D. from the School of Electrical and Computer Engineering at Purdue University. Ahmad was an intern at the Laboratory of Information and Decision Systems (LIDS) at MIT and the Department of Electrical & Computer Engineering at the University of Toronto in 2010 and 2014, respectively. In Spring 2015, Ahmad was a visiting researcher at the Energy Systems Division at Argonne National Laboratory, where he collaborated with scientists on the cyber-security and state-estimation in smart power grids. Dr. Taha recently joined the ECE department at the University of Texas, San Antonio as an assistant professor. His research interests are in optimization, control, cyber-security and decision making of cyber-physical and networked control systems — all with applications to smart-grids.