

SEMINAR NOTICE:



Interim review of Smart Grid IT program at ADSC

David Yau

*Smart Grid Program Director at the Advanced
Digital Sciences Center in Singapore*

**Thursday, June 14
3:00 p.m.
CSL 301**



Abstract:

The Smart Grid IT program at ADSC is in an active phase of development. Our goal is to push control and intelligence to the edge, to bring about several key benefits: (i) robustness and resiliency against contingencies, (ii) integration of renewables for energy sustainability, (iii) reduced energy consumption, and (iv) increased customer satisfaction. In this talk, I will review our current progress in addressing several key challenges in "thinning the waist" of future intelligent grids: (i) security analysis of cyber-physical systems (as precursor activities to the ambitious goal of integrated security analysis of complex systems), (ii) scalable and non-intrusive energy monitoring and optimization for demand response, and (iii) robust and secure wireless HEMS communication.

Biosketch:

David Yau is the Smart Grid Program Director at the Advanced Digital Sciences Center in Singapore. His research interests are in network and operating system quality of service, network security, incentive protocols, value-added services routers, and mobile wireless networks. A major goal is to improve the performance and robustness of complex large-scale networks for heterogeneous applications. Dr. Yau has been invited to serve as panelist and reviewer by the National Science Foundation (NSF), the Research Grants Council of Hong Kong, and the Research Council of Norway. His research has been funded by various government and industrial organizations including the NSF. He is a member of the ACM and IEEE. He serves on the editorial board of the *IEEE/ACM Transactions on Networking*, and has served on the organizing and technical program committees of many ACM and IEEE conferences. David received a CAREER award from the NSF. He was the recipient of a Hong Kong Government Scholarship, a Swire Scholarship, a Microelectronics and Computer Development Fellowship (UT Austin), and an IBM Fellowship. Prior to academia, he was employed as Management Associate and then Assistant Manager at Citibank, NA.