



香港中文大學
The Chinese University of Hong Kong

Institute of Theoretical Computer Science and Communications

IE- ITCSC Joint Seminar

Smart Grid Communications and Networking: An Overview

By

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2:30pm – 3:30pm

Rm. 121, 1/F., Ho Sin Hang Engineering Building, CUHK

Abstract:

In this presentation, an introduction to the various data communications and networking technologies being developed for smart grid will be provided. First, a brief overview of smart grid, enabling technologies for smart grid, and the importance of data communication for reliable and efficient operation of smart grid will be presented. The details of data communication and networking infrastructure (e.g., home area network, wide-area measurement system, home energy management system, advanced metering infrastructure, demand response management, and sensor and actuator network), and the related standardization activities will then be discussed. To this end, several major open research issues and directions for future research on smart grid communications and networking will be outlined.

Biography:

Dusit Niyato is currently an Assistant Professor in the Division of Computer Communications, School of Computer Engineering, Nanyang Technological University, Singapore. His current research interests include design, analysis, and optimization of wireless communication and vehicular networks for ITS applications, smart grid systems, and green radio communications. He is co-author of the books *Dynamic Spectrum Access and Management in Cognitive Radio Networks* (Cambridge University Press, 2009) and *Game Theory in Wireless and Communication Networks: Theory, Models, and Applications* (Cambridge University Press, 2009, ISBN: 978-0-521-89847-8). He has published more than 80 papers in leading Journal and Conferences related to protocol design and radio resource management in mobile communication systems. Dr. Niyato serves as an Editor for the *IEEE Transactions on Wireless Communications*, *Wireless Communications and Mobile Computing (WCMC) Journal*, and *Journal of Communications and Networks (JCN)*.

***** ALL ARE WELCOME *****

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