

## SEMINAR ANNOUNCEMENT

### DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Faculty of Engineering

Website: <https://www.eng.nus.edu.sg/ece/>

**Area: Power and Energy Systems**

**Host: Prof Dipti Srinivasan**

**Organized By:**

**Green Energy Management and Smart Grid Research Center (GEMS),**

**IEEE Computational Intelligence Society Singapore Chapter,**

**Department of Electrical & Computer Engineering, National University of Singapore**

<b>TOPIC</b>	:	<b>Analysis and Synthesis of Multi-agent systems: Basic Concept, Key Issues and Applications</b>
<b>SPEAKER</b>	:	<b>Associate Professor Zhang Dan, Zhejiang University of Technology, Hangzhou, China</b>
<b>DATE</b>	:	<b>19 August 2019, Monday</b>
<b>TIME</b>	:	<b>3pm to 4pm</b>
<b>VENUE</b>	:	<b>E4-04-03, Engineering Block E4, Faculty of Engineering, NUS</b>

### ABSTRACT

Multi-agent systems (MASs) are typically composed of multiple smart entities with independent sensing, communication, computing, and decision-making capabilities. Nowadays, the MASs have a wide range of applications in smart grids, smart manufacturing, sensor networks and intelligent transportation. In this talk, we would introduce some basic concepts of MASs, and deliver some recent research topics in this area. Then, applications of the MASs to the sensor works, vehicle platoon, and power systems are presented. Finally, some future directions are highlighted.

### BIOGRAPHY

Dan Zhang received the Ph.D. degree from the Zhejiang University of Technology, Hangzhou, China, in 2013. He was a Research Fellow with the School of Electrical and Electronic Engineering, Nanyang Technological University, the School of Electrical and Computer Engineering, National University of Singapore, and the Department of Biomedical Engineering, City University of Hong Kong, Hong Kong. His research interests include multi-agent systems, hybrid switched systems, and cyber-physical systems.

Dr. Zhang was a recipient of Qianjiang Talent in 2014 and the Xiangjiang Scholarship in 2017. He is an Area Editor for the International Journal of Uncertainty, Fuzziness and Knowledge-based Systems, an Associate Editor of ISA Transactions, International Journal of Control, Automation and Systems, and the Editorial Board Member of some other journals/conferences. He was also an Associate Editor of Neurocomputing from 2015 to 2017.

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