

Design and Automation

Speaker:

Prof. Xie Ming

Nanyang Technological University

mmxie@ntu.edu.sg

Description:

The five key characteristics of future products or systems are such as being smart, being network-centric, being compact, being energy-efficient, and being environment-friendly. Therefore, it is important for professionals to gain basic knowledge about the topics related to design and automation of future products or systems. Although automation may refer to industrial automation as well as office automation and automation of services, this seminar will mainly focus on design and automation in industry. However, the contents presented in this seminar will be applicable to automations in other fields as well. Hence, in this seminar, I will talk about the following important contents: a) design for achieving actuated motions in automation, b) design for achieving controlled motions in automation, and c) design for achieving intelligent motions in automation.

Biodata of Speaker:



Xie Ming received the B.Eng degree in control and automation engineering. Subsequently, as a recipient of the overseas scholarship from Chinese government, he has completed the study for Master degree in the University of Valenciennes (France) as well as the research for PhD degree in the University of Rennes (France). He is Associate Professor of Nanyang Technological University, and was a Fellow with Singapore-MIT Alliance (SMA). He was the General Chair of 2007 International Conference on Climbing and Walking Robots (CLAWAR), the General Chair of 2009 International Conference on Intelligent Robotics and Applications (ICIRA), the Co-founder of the International Journal of Humanoid Robotics (SCI/SCIE indexed), Co-founder of Singapore-China Association for Advancement of Science and Technology, Co-founder of Robotics Society of Singapore. He has taught the courses such as Robotics,

Artificial Intelligence, Applied Machine Vision, Measurement and Sensing Systems, Microprocessor Systems, and University Physics. In terms of scientific research, he has published two books, two edited books, several book chapters, over 10 patents of invention, over 30 research papers in scientific journals and over 100 research papers in international conferences. He was the recipient of one best conference paper award from World Automation Congress, the recipient of one best conference paper award from CLAWAR, the recipient of one outstanding paper award from International Journal of Industrial Robot, the recipient of one Gold Prize (S\$8K) from CrayQuest, the recipient of one Grand Champion Prize (S\$15K) from CrayQuest, the recipient of one A-Star's Best Research Idea Prize (S\$5K), the recipient of one Silver Medal from Dragon Design Foundation.