

Abstract for 30 October 2021, Taoyuan, Taiwan

Advances in Internet of Things: Trends and Applications

Prof. Yeong-Lin Lai

Department of Mechatronics Engineering, National Changhua University of Education, Taiwan

In the era of the Internet of Things (IoT), objects can communicate and exchange information with objects. The IoT is one of the indispensable technologies for realizing modern services. The trends and applications of the IoT are diverse and are rapidly extended to almost all areas of daily life. In this speech, the recent advances in IoT will be presented from the perspectives of trends and applications. The multidisciplinary fields including health care, smart cities, and Industry 4.0 will be concentrated. An intelligent IoT health monitoring system is realized for health care. Brand-new IoT systems are developed for a smart city. Novel IoT devices are invented for Industry 4.0. Through the advanced IoT technologies, the connections between objects will increase exponentially and an entirely new ubiquitous world will be created.

Experience:

Dr. Lai is currently a Distinguished Professor with the Department of Mechatronics Engineering, National Changhua University of Education, Taiwan. He is also the Dean of the College of Engineering and the Director of the Baoshan Campus Joint Services Center, National Changhua University of Education. His research interests include Internet of Things, intelligent systems, and artificial intelligence. From 1985 to 1989, he was with the Electronic Systems Research Division, National Chung-Shan Institute of Science and Technology, Taiwan, where he worked in the field of electronic system design and testing. From 1992 to 1993, he was a Senior Engineer at Macronix International Co., Ltd., Hsinchu Science Park, Taiwan, where he was engaged in VLSI design. In 2001 and 2003, he was the visiting scholar of Communication Research Center, Ottawa, Canada. From 2012 to 2017, Dr. Lai was the Director of the Mechatronic Integration and System Control Research Center, National Changhua University of Education. From 2012 to 2018, he was the Chairman of the Department of Mechatronics Engineering, National Changhua University of Education. From 2018 to 2020, Dr. Lai was the Dean of the General Affair and the Director of the Center of Environmental Protection and Occupational Safety and Health, National Changhua University of Education. Dr. Lai is a Fellow of the ElectroMagnetics Academy and an International Fellow of Chinese Innovation and Invention Society.