



Name:

Yo-Ping Huang

Speech Title:

AI in Industry and Aquaculture

Abstract:

The growth of renewable energy has become a major focus worldwide due to various factors such as environmental concerns about global warming, abnormal weather conditions, and the depletion of fossil fuels. Among the different types of renewable energy sources, solar energy has gained significant attention due to its abundance, sustainability, and lack of pollution. Most countries have set targets of increasing the share of renewable energy in total electricity generation to a certain percentage by 2030. As part of this plan, the production of solar energy needs to be raised from the earlier goals to new levels. Therefore, obtaining accurate information regarding the planning, monitoring, and technical aspects of photovoltaic (PV) power plants is essential to improve their performance.

Aquaculture is the fastest-growing food production sector around the world contributing approximately 50% of animal protein for half of the world's population. According to the Food and Agriculture Organization (FAO), it predicts that aquaculture production will rise to 53% by 2030.

Applications of AI algorithms, models, technologies, and systems play important roles and can be found everywhere, including widespread usage in industry. Furthermore, AI can be integrated with other techniques, such as Internet of Things (IoT), control methods, and edge computing to become powerful tools for industry and medical domains. This talk will focus on addressing the applications of AI to green energy and aquaculture.

Biography:

Yo-Ping Huang (Fellow, IEEE) received the Ph.D. degree in electrical engineering from Texas Tech University, Lubbock, TX, USA. He is the President of National Penghu University of Science and Technology, Penghu, Taiwan. He is also a Chair Professor in the Department of Electrical Engineering, National Taipei University of Technology, Taipei, Taiwan, where he served as the Secretary General. He was a Professor and the Dean of Research and Development, the Dean of the College of Electrical Engineering and Computer Science, and the Department Chair

with Tatung University, Taipei. His current research interests include deep learning modeling, intelligent control, fuzzy systems design and modeling, and rehabilitation systems design.

Dr. Huang received 2021 Outstanding Research Award from Ministry of Science and Technology (MOST), Taiwan, and 2022 IoT Innovative Application Award from Pan Wen Yuan Foundation. He is a Fellow of IET, CACS, and TFSA. He serves as the IEEE SMCS VP for Conferences and Meetings, and Chair of the IEEE SMCS Technical Committee on Intelligent Transportation Systems. He was the IEEE SMCS BoG, President of the Taiwan Association of Systems Science and Engineering, the Chair of IEEE SMCS Taipei Chapter, the Chair of the IEEE CIS Taipei Chapter, and the CEO of the Joint Commission of Technological and Vocational College Admission Committee, Taiwan.

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