THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering
Seminar

Data-driven Energy Systems:
Applications, Platforms, and Benchmarking

by

Prof. Dan Wang
The Hong Kong Polytechnic University, Hong Kong

Date : **25 July 2023 (Tuesday)**
Time : **11:00am – 12:00noon**
Venue : **Room 804, William M.W. Mong Engineering Building, CUHK**

Abstract

The traditional way to control energy systems is by strategies based on principles of physics. Now there is a transformation where the decision-making is driven by information and data technologies. In this talk, we will briefly review some data-driven applications. With an increasing number of applications, a new challenge is to support such applications at scale. The main problem is how to handle various levels of heterogeneities in different energy systems so that data and machine learning models can be used with minimal human involvement. We present our recent works to automatically translate data into standards and extract data under various local data conventions; as well as schemes to evaluate appropriate machine learning models at scale. We are working with the Electrical and Mechanical Services Department (EMSD) of the Hong Kong government to benchmark data and machine learning models, in the hope to accelerate AI deployment in the campaign towards a smart city and a green city.

Biography

Dan Wang is a professor in the Department of Computing, The Hong Kong Polytechnic University. His research interests lie in smart energy systems. He published in ACM eEnergy and ACM Buildsys, and he won the best papers in both conferences. He is currently the steering committee chair of ACM eEnergy. He is an advisor of EMSD, the Hong Kong SAR government. He has extensive experience in applied research and his research results have been adopted by industry, including Huawei, IBM, Henderson, etc.

** ALL ARE WELCOME **

Host: Prof. XING Guoliang (Tel: 3943-8474, Email: glxing@cuhk.edu.hk)
Enquiries: Department of Information Engineering, CUHK (Tel.: 3943-8385)