

Dr. Chunsheng Yang

Senior Research Officer
National Research Council of Canada

TITLE: Machine Learning-based
Predictive Modeling Technologies

January 31st (Wed) 10:30-12:00
@ NITech Hall

Abstract:

The need for higher equipment availability and lower maintenance cost is driving the development and integration of prognostic and health management (PHM) systems. Taking advantage of advances in sensor technologies, PHM systems enable a predictive maintenance strategy through continuously monitoring the health of complex systems. The core of PHM technology is prognostics which is able to predict the likelihood of a failure and estimate time to failure (TTF) using the predictive models. The predictive models could be either physics-based models or machine learning-based models. In this talk, I will talk about the machine learning-based techniques for predictive modeling, including classification, on-demand regression along with the real-world applications.

Biography:

Dr. Chunsheng Yang is a Senior Research Officer at the National Research Council Canada. He is interested in data mining, machine learning, reasoning technologies such as case-based reasoning, rule-based reasoning and hybrid reasoning, and intelligent systems. He received an Hons. B.Sc. in Electronic Engineering from Harbin Engineering University, China, an M.Sc. in computer science from Shanghai Jiao Tong University, China, and a Ph.D. from National Hiroshima University, Japan. He worked with Fujitsu Inc., Japan, as a Senior Engineer and engaged on the development of ATM Network Management Systems. He was an Assistant Professor at Shanghai Jiao Tong University from 1986 to 1990 working on Hypercube Distributed Computer Systems. Yang has been the author for 135 technical papers (book chapters) and reporters published in the referred journals and conference proceedings. He is a Program Co-Chair of the 20th IEEE International Conference on Computer Supported Cooperative Work in Design (CSCWD 2016). He was a Program Co-Chair for the 17th International Conference on Industry and Engineering Applications of Artificial Intelligence and Expert Systems. Dr. Yang is a guest editor for the International Journal of Applied Intelligence.

本講演は博士前期・博士後期「特別演習」認定講義となります。
出席の上、必要な条件を満たした場合は、以下の科目の認定要件に加算されます。

・材料・エネルギー特別演習 1・2 ・情報・社会特別演習 1・2
・材料・エネルギー先進特別演習 1・2 ・情報・社会先進特別演習 1・2

[Contact] Takayuki Ito Laboratory, Nagoya Institute of Technology
Mail: contact@itolab.nitech.ac.jp | TEL: 052-735-7968