

IEEE KITCHENER-WATERLOO

IEEE KW Signal Processing Neural Network Chapter

Professor Mo Jamshidi

Autonomous Control Engineering - ACE Center and Department of
Electrical and Computer Engineering
University of New Mexico

"Prognostics of Hardware Systems"

Abstract:

Prognostics of hardware systems is an active area of research that revolves around the development of techniques for assessing and ensuring the integrity of engineering systems. System integrity is particularly important for physical and industrial systems that are mission critical and with massive amounts of output data. The objective of this talk is to describe a number of data-driven and knowledge-based paradigms and algorithms to reduce data and provide robust prognostics of hardware faults. Two case studies - a chiller system and a laser pointing system will be discussed.

Biography:

Professor Mohammad Mo Jamshidi received his Ph.D. degree in Electrical Engineering from the University of Illinois at Champaign-Urbana in February 1971. His other degrees were MS in EE from University of Illinois in 1969 and BS EE from Oregon State University, Corvallis, OR in 1967. He is the founding Director of Center for Autonomous Control Engineering (ACE), and Regents Professor of Electrical and Computer Engineering at the University of New Mexico. He holds the AT&T Professorship of Manufacturing Engineering. He is also Professor of Mechanical Engineering Director of Computer-Aided Design Laboratory for Intelligent and Robotic Systems at UNM. He is a member of NASA Minority Business Resource Advisory Committee (MBRAC) since 1996. He is a member of NASA and JPL Review Board for Surface Systems Track. He is a member of NRC Task Group for National Academy of Engineering's Aerospace Engineering Student National Education. He has over 450 technical publications including 45 books and edited volumes primarily in English. Six books have been translated into at least one foreign language. He is the chairman of the International Advisory Board of AutoSoft Journal - Intelligent Automation and Soft Computing. He is a Fellow of IEEE and recipient of the IEEE Centennial Medal and IEEE Control Systems Society Distinguished Member Award. He is a Fellow of AAAS, American Association for the Advancement of Science. He is a Fellow of the ASME, American Society of Mechanical Engineering, member of five honor societies, and honorary-chaired professor at 3 Chinese universities.

DATE: Friday May 7, 2004

TIME: 3:00 pm

LOCATION: EIT 3142



Invited by Dr. Otman A. Basir,
Associate Professor, Department of Systems Design Engineering