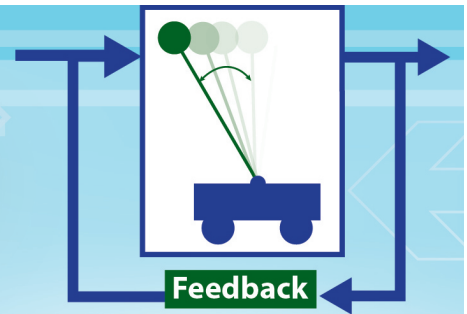


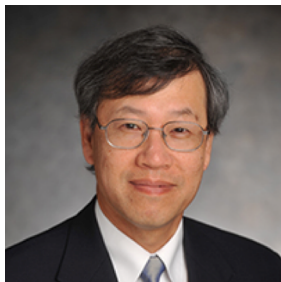
COLLEGE OF ENGINEERING

Control Seminar



Sponsored by: Bosch, Ford, and Toyota

High Performance Motion Control and Applications



Tsu-Chin Tsao

University of California, Los Angeles
Department of Mechanical Engineering

Friday, November 13, 2015

3:30 – 4:30 pm • 1500 EECS

ABSTRACT: Mechanical motion is ubiquitous in modern technological systems. In this talk I will present high performance digital control for generating precise mechanical motion where disturbances having both deterministic and stochastic components exist. Control algorithms that integrate adaptive filtering for minimizing random disturbances and internal models for suppressing deterministic disturbances will be discussed along with a number of application examples, including machine tools, disk drives, laser beams, magnetic bearings, and etc.

BIO: Tsu-Chin Tsao is Professor and Chair at the Mechanical and Aerospace Engineering Department, Henry Samueli School of Engineering and Applied Science, University of California Los Angeles. He received B.S. in engineering from National Taiwan University, Taipei, Taiwan, and M.S. and Ph.D. in mechanical engineering from University of California, Berkeley. His current research interests include control systems, mechatronics, and robotics. Dr. Tsao is a Fellow of ASME. His recognitions include ASME Journal of Dynamic Systems, Measurement, and Control Best Paper Award, ASME Dynamic Systems and Control Division Outstanding Young Investigator Award, American Automatic Control Council Hugo S. Shuck Best Paper Award, and International Symposium on Flexible Automation Best Paper Award.