



IEEE – Joint CSS/R&A Societies Chapter, Queensland,
Electrical Branch Committee, IEAust-Queensland



present

Embedding Intelligence via Opto-Mechatronic Technology

by
Hyungsuck Cho
KAIST Korea

Date: 14 January (Tuesday) 2003

Time: 5:30 pm for 6:00 pm
(Light refreshments will be provided from 5:30pm)

Place: Engineering House
447 Upper Edward Street, Brisbane

Abstract:

As mechatronic technology alone cannot achieve the functionality necessary for intelligent devices, optomechatronic technology is now considered as the essential enabling technology for embedding intelligence in to a system by integrating optical elements with mechatronic technology.

The seminar will illustrate this emerging trend, discuss several intelligent system concepts and address the structure and the functionality that intelligent machines must possess. Given this background we describe how this functionality provides the essential elements that enable machines/systems to exhibit intelligent behaviors.

About the Presenter:

Professor Hyungsuck Cho is currently with Department of Mechanical Engineering, Korea Advanced Institute of Science and Technology (KAIST), Korea. His research interest spans the areas of environment perception and recognition for mobile robots, machine vision and pattern classification, and application of artificial intelligence/machine intelligence. He has published over 400 research papers, book chapters, journal and conference papers. He currently serves on editorial boards of 6 international journals; IEEE Industrial Electronics, Journal of Robotic Systems, Robotica, Control Engineering Practice (IFAC), Journal of Advanced Robotics and Journal of Engineering Manufacture (PIME).

In addition to his academic activities, he has founded and chaired/co-chaired several international conferences including the FIRA Robot World Congress (2002), Opto-mechatronic Systems of SPIE – ISAM; International Conference on Control, Automation and Systems (2001), SPIE-Opto Mechatronic Systems (2000, 2001), IEEE/RSJ IROS(1999), International Workshop on Mechatronics Technology(1999) and the IFAC Workshop on Intelligent Manufacturing (1997). He also served on the program committees of a number of international conferences including IEEE R&A and IEEE/RSJ IROS, IFAC, ASME and SPIE.

For his achievements in research in the fields of robotics and automation, he was named POSCO professor (1995 to 2002), awarded Thatcher Bros Prize from the Institution of Mechanical Engineers UK and received the Best Paper Award at ISRAM conference in the year of 1994. He is also the recipient of the Alexander von Humboldt Fellowship (1984) and was President of Institute of Control, Automation and Systems Engineers, Korea for the year of 2001.

RSVP: Please reply to Ms Annah Beere, QLD Division Phone: (07) 3832 3749, Email: abeere@ieaust.org.au by 27/02/2002.