INVITATION TO SEMINAR

RMIT Platform Technologies Research Institute Distinguished Lecture Series: Intelligent Systems: An Assessment of the Past and the Prospects for the Future presented by Professor Okyay Kaynak, Director of the Mechatronics Research and Application Centre and Professor at Bogazici University, Istanbul, Turkey.

Date
Friday, 3 February 2012
Time
10:00am - 11:30 am Morning tea at 10am
Venue
RMIT University, Research Lounge, Building 8, Level 5, City Campus (opposite RMIT library, via escalators).
RSVP
platformtechnologies@rmit.edu.au

About the presenter
Okyay Kaynak received a BSc with first class honors and PhD in electronic and electrical engineering from the University of Birmingham in the United Kingdom, in 1969 and 1972 respectively.

From 1972 to 1979, he held various positions within the industry including three and a half years in Saudi Arabia as a project engineer.

In 1979, he joined the Department of Electrical and Electronics Engineering, Bogazici University, Istanbul, Turkey, where he is presently a Full Professor. He has served as Chairman of both the Computer Engineering and the Electrical and Electronic Engineering Departments and as the Director of the Biomedical Engineering Institute at this University. Professor Kaynak is currently the UNESCO Chair on Mechatronics and Director of the Mechatronics Research and Application Centre. He has held long-term positions as visiting Professor or Scholar at various institutions in Japan, Germany, the United States and Singapore. His current research interests are in the fields of intelligent control and mechatronics. He has authored three books and edited five and authored or coauthored more than 300 papers that have appeared in various journals, books and conference proceedings.

Professor Kaynak is a fellow of IEEE and has served on the Editorial or Advisory Boards of a number of scholarly journals. Currently he is a Co-Editor-in-Chief of the IEEE Transactions on Industrial Electronics and an Associate Editor of IEEE Sensors Journal, IEEE/ASME Trans. on Mechatronics and IEEE Trans. on Industrial Informatics.

Professor Kaynak is active in international organizations, has served on many committees of IEEE and was the president of IEEE Industrial Electronics Society during 2002-2003. He received IEEE Third Millennium Medal (2000), IEEE/IES Anthony J. Hornfeck Service Award (2005) and IEEE/IES Dr.-Ing. Eugene Mittelman Achievement Award (2011).

About the presentation
The last decade of the last millennium is characterized by what might be called the intelligent systems revolution. As a result of this, it is now possible to have man-made systems which exhibit the ability to reason, learn from experience and make rational decisions without human intervention. The phrase MIQ (machine intelligence quotient) was coined by Professor Lotfali Askar Zadeh of the University of California, Berkeley to describe a measure of intelligence of man-made systems. In this perspective, an intelligent system can be defined as a system that has a high MIQ.

In this presentation the state-of-the-art research in intelligent systems is discussed providing examples and a perspective on the future. The reasons behind the slow pace of developments will also be discussed. The talk will close with a consideration of the possible research directions in mechatronics and robotics as driving forces behind the development of intelligent systems.