A DISTINGUISHED LECTURE ON:
AUTOMATED EEG-BASED DIAGNOSIS OF NEUROLOGICAL
AND PSYCHIATRIC DISORDERS

Hojjat ADELI, Ph.D.
Abba G. Lichtenstein Professor
Departments of Biomedical Engineering, Biomedical Informatics, Civil and Environmental Engineering and Geodetic Science, Electrical and Computer Engineering, Neurological Surgery, and Neuroscience
The Ohio State University, USA

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Venue: Room Y303, 3/F, Block Y, Lee Shau Kee Building, The Hong Kong Polytechnic University

Abstract:
A research ideology, a novel multi-paradigm methodology, and advanced computational models are presented for automated electroencephalogram (EEG)-based diagnosis of neurological and psychiatric disorders. The methodology is based on adroit integration of three different computing technologies and problem solving paradigms: neural networks, wavelets, and the chaos theory. Examples of the research performed by the author and his associates for automated diagnosis of epilepsy, the Alzheimer’s Disease, Attention Deficit Hyperactivity Disorder (ADHD), and autism spectrum disorder (ASD) are discussed.

Biosketch:
Hojjat Adeli received his Ph.D. from Stanford University in 1976 at the age of 26. He has authored over 500 research and scientific publications in various fields of computer science, engineering, applied mathematics, and medicine including 14 books including Automated EEG-based Diagnosis of Neurological Disorders - Inventing the Future of Neurology published by CRC Press in 2010. In 1998 he received the Distinguished Scholar Award from OSU, “in recognition of extraordinary accomplishment in research and scholarship”. In 2005, he was elected Honorary/Distinguished Member, ASCE: “for wide-ranging, exceptional, and pioneering contributions to computing in civil engineering and extraordinary leadership in advancing the use of computing and information technologies in many engineering disciplines throughout the world.” In 2010 he was profiled as an Engineering Legend in the ASCE journal of Leadership and Management in Engineering. Same year he was included in The Ohio State University Buckeye Wall of Brilliance, “a permanent exhibition documenting the areas of inspiration and innovation from Buckeyes throughout Ohio State’s history.” He is a Fellow of the American Association for the Advancement of Science and IEEE. He is the Founder and Editor-in-Chief of international research journals Computer-Aided Civil and Infrastructure, now in 27th year of publication, and Integrated Computer-Aided Engineering, now in 20th year of publication, and the Editor-in-Chief of International Journal of Neural Systems. Earlier this year he received the 2012 IEEE-EMBS Outstanding Paper Award.

Any enquiries, please contact Ms Candy Yung at 3400-8577.

All are Welcome!