



# The Institute of Electrical and Electronics Engineers, Inc

Computational Intelligence

Computational Intelligence Society Chapter, Hyderabad

In Association with Research Centre Imarat, Hyderabad

Presents Technical Talk on

## Machine Learning Methods for Control Applications By

Dr. Vijaysekhar Chellaboina Professor and Deputy Dean of Academics Mahindra Ecole Centrale, Hyderabad

Date & Time: 27 July 2016, 10:30 to 11:30

#### **Location:**

Research Centre Imarat, Vignyana Kancha, Hyderabad https://goo.gl/maps/x3igJ5Y5Rf12

### **For Registrations**

Please send a mail with your details to <u>swarnabai.arniker.dr@ieee.org</u>

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## Abstract

Imprecision and Uncertain conditions are frequently encountered in control problems, leading to non-optimal/non-robust performance of systems. Machine learning methods offers better alternatives in designing systems that provide robust control even if external forces/factors acting on the system have a high degree of variability. Moreover, the availability of super fast computers with practically unlimited computational power, implementing machine learning methods for many practical problems have become easier and are increasingly becoming popular for solving innumerable problems including control of complex systems in real world applications. This talk will give a cursory introduction to the need for non-traditional control techniques and to machine learning techniques in control.

### **About the Speaker**

Dr. Vijaysekhar Chellaboina is a Professor and Deputy Dean of Academics at Mahindra Ecole Centrale. He holds a B. Tech in Mechanical Engineering from the Indian Institute of Technology-Madras, Chennai (1991), M.S. in Mechanical Engineering from Florida Institute of Technology, Melbourne (1993), and a Ph.D. in Aerospace Engineering from Georgia Institute of Technology, Atlanta (1996). Prior to joining the MEC in 2014, Dr. Chellaboina was a Principal Scientist and Head of the Risk and Finance Research Group at TCS Research (2008-2014) and held faculty positions in Mechanical Engineering at the University of Missouri (1999-2004) and the University of Tennessee (2004-2008).

Dr. Chellaboina's current research interests include quantitative finance, risk minimization, applied stochastic processes, stochastic optimization. His broader research interests include control systems theory and its applications. He is a coauthor of numerous articles and five books on the subjects of stability theory and control including Nonlinear Dynamical Systems and Control: A Lyapunov-Based Approach

\*Note All registered participants should reach before 10.00 am as it takes some time for security clearance. Also, they should provide Name, Profession, Company name for registration. Further, it is mandatory to present identity card of their parent organization for security clearance.