Global Warming, New Frontier of Research, Deep Learning, Predictive Control, and Solar Microgrid

Speaker:
Dr. Ali Keyhani
Professor at the Ohio State University

Abstract:
In this talk, recent findings of global warming, PV Modeling, Control PV Microgrid, New Frontier of Research, Neural Network Predictive Control, and Deep Learning will be presented. With recent advances in microelectronic, a smartphone has the same memory and speed of calculation as computer system on the Apollo moon landing in 1969. Currently, a Digital Signal Processing (DSP) provides high-speed data accusation and memory and speed that makes possible to develop a neural network predictive control model and implement precise control of solar microgrid. The talk will end with a look at deep learning algorithms and their impact on all aspect of technology.

About Speaker:
Dr. Keyhani is a fellow of IEEE and recipient of the Ohio State University College of Engineering Research Award for 1989, 1999, and 2003. From 1967 to 1972, he worked for Hewlett-Packard Co. Columbus Southern Ohio Electric Co. and TRW Control. From 1975 until 1980, he was a professor at Tehran Polytechnic in Tehran. Currently, he is a Professor of Electrical and computer engineering at the Ohio State University, Columbus, Ohio. Dr. Keyhani’s research activities focus on the design and control and integration of renewable and green energy sources in distributed energy systems, control of power electronic systems, advanced electric propulsions, modeling of electric machine, DSP-based virtual test bed for control of electro-mechanical systems, automotive systems, modeling, parameter estimation and failure detection systems. His Research work has been supported by the National Science Foundation, American Electric Power Cooperation, Delphi Automotive systems, Liebert Cooperation, General Motors, Ford Motor Company, and TRW.