CSE Colloquium and Distinguished LECTURE SERIES

Vijay Narayanan

Pennsylvania State University

Monday, November 4, 2013
11:00AM - 12:00PM
CSE 1202

Vision Analytics: Confluence of Algorithms, Architectures and Technology

While several machine vision systems today can each successfully perform one or a few human tasks – such as detecting human faces in point-and-shoot cameras – they are still limited in their ability to perform a wide range of visual tasks, to operate in complex, cluttered environments, and to provide reasoning for their decisions. In contrast, the mammalian visual cortex excels in a broad variety of goal-oriented cognitive tasks, and is at least three orders of magnitude more energy efficient than customized state-of-the-art machine vision systems. This talk will highlight ongoing working towards designing a holistic machine vision system that will approach the cognitive abilities of the human cortex, by developing a comprehensive solution consisting of vision algorithms, hardware design, human-machine interfaces, and information storage.

Biography

Vijaykrishnan Narayanan is a Professor of Computer Science and Engineering and Electrical Engineering at Pennsylvania State University. His research and teaching interests include embedded systems, computer architecture, system design using emerging device technologies and power-aware computing. He has deep interests in cross-disciplinary advances and has led and participated in such projects. He is the deputy editor-in-chief of IEEE TCAD and served as the editor-in-chief for ACM Journal of Emerging Technologies in Computing Systems. He has won several awards including the 2012 ASPDAC Ten-year retrospective Most influential paper, 2012 Penn State Alumni Society Premier Research Award and 2010 Outstanding Alumnus Award from SVCE, India. He is a fellow of IEEE.

For more information, please contact the Chair's Office at (858) 822-5198 or cse-cc@eng.ucsd.edu