



Department of Computer Science and Engineering

*Presents*

Camillo J. Taylor, University of Pennsylvania

Parsing Indoor Scenes using RGB-D Imagery

The advent of the Kinect sensor has made it much easier to acquire real-time, high quality depth maps of indoor scenes and has inspired a spate of research into new algorithms to take advantage of this capability. This talk will describe our efforts to develop schemes to construct semantic level descriptions of indoor scenes from this kind of RGB-D imagery. One of the ultimate goals of this work is to develop fast, reliable algorithms that robots could use to make sense of their environment. The talk will touch on a number of issues including real-time image segmentation algorithms inspired by randomized hashing, fast surface extraction informed by image segmentation and optimization-based scene analysis algorithms which are designed to extract high-level floor plans of real scenes.

Dr. Taylor received his A.B. degree in Electrical Computer and Systems Engineering from Harvard College in 1988 and his M.S. and Ph.D. degrees from Yale University in 1990 and 1994 respectively. Dr. Taylor was the Jamaica Scholar in 1984, a member of the Harvard chapter of Phi Beta Kappa and held a Harvard College Scholarship from 1986-1988. From 1994 to 1997 Dr. Taylor was a postdoctoral researcher and lecturer with the Department of Electrical Engineering and Computer Science at the University of California, Berkeley. He joined the faculty of the Computer and Information Science Department at the University of Pennsylvania in September 1997. He received an NSF CAREER award in 1998 and the Lindback Minority Junior Faculty Award in 2001. Dr Taylor's research interests lie primarily in the fields of Computer Vision and Robotics and include: reconstruction of 3D models from images, vision-guided robot navigation and smart camera networks. Dr. Taylor has served as an Associate Editor of the IEEE Transactions of Pattern Analysis and Machine Intelligence. He has also served on numerous conference organizing committees and was a Program Chair of the 2006 edition of the IEEE Conference on Computer Vision and Pattern Recognition.

**Thursday, October 20, 2011 3:30 - 4:30 PM**

**University at Buffalo – North Campus – Knox 104**

This talk is free and open to the public

Refreshments for attendees after the talk in Bell 224

For more information, please email [cse-dept@cse.buffalo.edu](mailto:cse-dept@cse.buffalo.edu) or contact (716) 645-3180