HUMANITY CENTERED ROBOTICS INITIATIVE

BROWN

Dieter Fox
University of Washington

"RGB-D Perception in Robotics"

Wednesday, September 24, 2014
12:00 – 1:30pm
Barus and Holley Room 190

RGB-D cameras provide per pixel color and depth information at high frame rate and resolution. Gaming and entertainment applications such as the Microsoft Kinect system resulted in the mass production of RGB-D cameras at extremely low cost, also making them available for a wide range of robotics applications. In this talk, I will provide an overview of depth camera research done in the Robotics and State Estimation Lab over the last five years. This work includes 3D mapping, autonomous object modeling, unsupervised feature learning for object recognition, and articulated object tracking.

Dieter Fox is a Professor in the Department of Computer Science & Engineering at the University of Washington, where he heads the UW Robotics and State Estimation Lab. From 2009 to 2011, he was also Director of the Intel Research Labs Seattle. He currently serves as the academic PI of the Intel Science and Technology Center for Pervasive Computing hosted at UW. Dieter obtained his Ph.D. from the University of Bonn, Germany. Before going to UW, he spent two years as a postdoctoral researcher at the CMU Robot Learning Lab. Fox's research is in artificial intelligence, with a focus on state estimation applied to robotics and activity recognition. He has published over 150 technical papers and is co-author of the text book "Probabilistic Robotics". He is a fellow of the AAAI and received several best paper awards at major robotics and AI conferences. He is an editor of the IEEE Transactions on Robotics, was program co-chair of the 2008 AAAI Conference on Artificial Intelligence, and served as the program chair of the 2013 Robotics: Science and Systems conference.

This presentation is part of the HCRI's Multidisciplinary Speaker Series that showcases diverse and groundbreaking research undertaken by leaders in science, technology, design, and impact of robotics on society.

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