Research Talk:
Michael Beetz, University of Bremen

"openEASE --- A Knowledge Processing Service for Robots and Robotics Researchers"

Tuesday, February 3, 2015
11:30am – 1:00 pm
CIT 477 Lubrano Conference Room

Making future autonomous robots capable of accomplishing human-scale manipulation tasks requires us to equip them with knowledge and reasoning mechanisms. We propose openEASE, a remote knowledge representation and processing service that aims at facilitating these capabilities. openEASE provides its users with unprecedented access to knowledge of leading-edge autonomous robotic agents. It also provides the representational infrastructure to make heterogeneous experience data from robots and human manipulation episodes semantically accessible, as well as a suite of software tools that enable researchers and robots to interpret, analyze, visualize, and learn from the experience data. Using openEASE users can retrieve the memorized experiences of manipulation episodes and ask queries regarding to what the robot saw, reasoned, and did as well as how the robot did it, why, and what effects it caused.

Michael Beetz is a professor for Computer Science at the Faculty for Informatics of the University of Bremen and head of the Institute for Artificial Intelligence. From 2006 to 2011, he was vice coordinator of the German national cluster of excellence CoTeSys (Cognition for Technical Systems) where he is also co-coordinator of the research area "Knowledge and Learning".

Michael Beetz received his diploma degree in Computer Science with distinction from the University of Kaiserslautern. He received his MSc, MPhil, and PhD degrees from Yale University in 1993, 1994, and 1996 and his Venia Legendi from the University of Bonn in 2000. Michael Beetz was a member of the steering committee of the European network of excellence in AI planning (PLANET) and coordinating the research area ``robot planning''. He is associate editor of the AI Journal. His research interests include plan-based control of robotic agents, knowledge processing and representation for robots, integrated robot learning, and cognitive perception.