Motion Planning for Industrial Robots
ICRA 2014
June 5, 9:00 a.m. - 5:30 p.m.

9:00 a.m. - 10:30 a.m.
Chaired by Dinesh Manocha

9:00 a.m. Motion Planning for Humanoid Robots: Feedback from HRP2-14 Platform
Jean-Paul Laumond (LAAS-CNRS, Toulouse)

9:30 a.m. Robot Programming for Assembly Tasks
Yukiyasu Domae & Akio Noda (Mitsubishi Electric Corporation)

10:00 a.m. Automated Planning for Supporting Human Robot Collaboration in Assembly Cells
Satyandra Gupta (University of Maryland)

10:50 a.m. - 12:30 p.m.
Chaired by Jean-Paul Laumond

10:50 a.m. Overview of IEEE RAS TC
Kostas Bekris

11:00 a.m. Many-robot Path Planning & Other Warehouse Robot Challenges
Joseph Durham (Kiva Systems)

11:30 a.m. Motion Planning & Proximity Computations for Industrial Robots: Challenges & Lessons Learned
Dinesh Manocha (UNC-Chapel Hill)

12:00 p.m. Control & Motion Planning for Flexible Parts Assembly
Kensuke Harada, Juan Rojas & Eiichi Yoshida (AIST, Tsukuba)

2:00 p.m. - 3:30 p.m.
Chaired by Eiichi Yoshida

2:00 p.m. Motion Planning for Industrial Robots using MoveIt!
Sachin Chitta (SRI International)

2:30 p.m. When the Travelling Salesman Meets the Piano Mover in a Digital Factory
Etienne Ferre (Siemens PLM Software, Toulouse)

3:00 p.m. Integrating Dynamics into Industrial Motion Planning
Quang-Cuong Pham (Nanyang Technological University, Singapore) & Huan Liu (Mujin Inc.)

3:50 p.m. - 5:30 p.m.
Chaired by Etienne Ferre

3:50 p.m. Overview of IEEE RAS TC
Kensuke Harada

4:00 p.m. Similar Part Rearrangement With Pebble Graphs
Athanasios Krontiris, Rahul Shome, Andrew Dobson, Andrew Kimmel, Isaac Yochelson, Kostas E. Bekris

4:30 p.m. Dual Arm Manipulation using Constraint Based Programming
Yuquan Wang, Francisco Viña, Yiannis Karayiannidis, Christian Smith, Peter Ögren

5:00 p.m. Trajectory Planning for Robots: The Challenges of Industrial Considerations
Joonyoung Kim, Elizabeth A. Croft

5:30 p.m. Presentation by Mujin
Rosen Diankov