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