

SIMPAR 2016 Workshop

Combining optimal control, reinforcement learning and movement primitives to achieve better robot motions

Organizer: Katja Mombaur, Heidelberg University
Place: Parc 55 Hotel, San Francisco, Room Cyril Magnin 1

Program

08:00	Registration, Arrival
08:45 – 09:00	Introduction
09:00 – 09:30	Chris Atkeson, CMU: Task-Level Optimization/Learning
09:30 – 10:00	Hongkai Dai, Toyota Research Institute / MIT Fast planning dynamical motion for humanoid robots
10:00 – 10:30	Coffee break
10:30 – 11:00	Richard Longman, Columbia University, New York: Difficulties Specifying Optimization Criteria and Then Making Hardware Perform Model Based Optimized Trajectories
11:00 – 11:30	Katja Mombaur, Heidelberg University: Model-based optimization for humanoid robots an assistive robotic devices
11:30 – 12:00	Dominik Endres, University of Marburg, Germany: Unifying movement primitives and optimal control for efficient humanoid gait Planners
12:00 – 13:30	Lunch break
13:30 – 14:00	Sergey Levine, UC Berkeley, USA: Deep Robotic Learning
14:00 – 15:00	Poster Session
15:00 – 15:30	Coffee break
15:30 – 16:00	Tamar Flash, Weizmann Institute, Israel: Optimization, geometrical approaches and primitives: motion planning and control in humans and robotic systems
16:00 – 16:30	Martin Giese, University of Tübingen, Germany: Predictive primitive-based human-like control of coordinated full-body movements for the HRP-2 humanoid robot
16:30 – 17:00	Final discussion