

WORKSHOP at IEEE HUMANOIDS 2011
Dynamic Models and Optimal Control of Humanoid Robots

PROGRAM

9:00 – 9:05: Introduction

9:05 – 9:35:

Chris Atkeson, CMU, USA : **Efficient Robust Policy Gradient Learning**

9:35 – 10:05:

Thomas Buschmann, TU München, Germany: **Modeling and Simulating Biped Robots**

10:05 – 10:35:

Olivier Bruneau, LISV-UVSQ, Paris, France: **What is a relevant modeling for anthropomorphic robots?**

10:35 – 11:00: COFFEE BREAK

11:00 – 11:30

Karim Bouyarmane, CNRS-AIST, JRL, Tsukuba, Japan: **Humanoid Motion Control through Changing Contact Configurations**

11:30 – 12:00

Katja Mombaur, University of Heidelberg, Germany: **Using optimal control to generate emotional body language for humanoid robots**

12:00 – 12:30:

James Kuffner, Google & CMU, USA: **Footstep Planning: Discrete Search and Whole-Body Dynamicstitle to be announced**

12:30 – 14:00: LUNCH BREAK

14:00 – 14:30

Thomas Moulard, LAAS-CNRS, Toulouse, France: **Trajectory following for legged robots**

14:30 – 15:00

Christian Ott, DLR, Munich, Germany: **Humanoid Walking Control using the Capture Point**

15:00 – 15:30: COFFEE BREAK

15:30 – 16:00

Katayon Radkhah, University of Darmstadt. Germany: **Dynamics modeling and simulation of hopping and running gaits for the musculoskeletal robot BioBiped1**

16:00 – 16:30

Francesco Nori, IIT Genua, Italy: **Active/Passive compliance and stochastic optimal control in movement planning**

16:30

Final Discussion