

Séminaire ISIR



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Gentiane Venture

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(<http://www.tuat.ac.jp/~venture/index.htm>)

Mercredi 06 Mars 2013 à 15h00

Campus Jussieu, 4 place Jussieu, Paris
Salle de réunion 304

Titre : Understanding human motions and applications to Human-Robot Interaction

Résumé:

The complexity of human movements demonstrates the brain's ability to control the musculo-skeletal system, taking advantage of body dynamics and processing feedback sensory information. However, because of injury, aging or disease, movement and cognitive disorders appear. Motion generation and control processes are crucial for understanding the brain, for developing artificial intelligence, and for enhancing medical diagnosis and rehabilitation procedures.

In that aim, based on motion data, we are developing algorithms and computational method to quantify and provide objective criteria.

This presentation will focus on introducing the numerical tools for the understanding of the human motions, the human body dynamics and the human affects, and the results of a study conducted on the importance of the "familiar" in HRI.

Bio :

Gentiane Venture has completed an Engineer's degree from the Ecole Centrale of Nantes (France) in 2000 in Robotics and Automation and a MSc from the University of Nantes (France) in Robotics. In 2003, she obtained her PhD from the University of Nantes (France). In 2004 she joined the French Nuclear Agency (Paris, France), to work on the control of a tele-operated micro-manipulator. Later in 2004 she joined Prof. Yoshihiko Nakamura's Lab. at the University of Tokyo with the support of the JSPS. In 2006, still under Prof. Nakamura, she joined the IRT project as a Project Assistant Professor. In March 2009, she becomes an Associate Professor and starts a new lab at the Tokyo University of Agriculture and Technology. Her main research interests include: Human behavior understanding from motion, Human body modelling, Dynamics identification, Control of robot for human/robot interaction, Human affect recognition.

Sous la co-tutelle de