

Shingo Shimoda



Position

Unit leader

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Education

Ph.D Department of Electronics Engineering, University of Tokyo, 2005

M. Sci Department of Environmental studies, University of Tokyo, 2001

B. Sci Department of Mechano-Infomatics, University of Tokyo, 1999

Work experience

2005-2008 Research Scientist, Biological control system laboratory,
Biomimetic control research center, RIKEN

2003-2004 Visiting student, Field and space robotics laboratory,
Massachusetts institute of technology

Award

- IROS CoTeSys Cognitive Robotics Best Paper Award in IEEE/RSJ International Conference on Intelligent Robots and Systems 2010
- General Chairs' Recognition Award in 48th IEEE Conference on Decision and Control (CDC2009)
- Research Encouragement Award, The Robotics Society of Japan, 2002
- The Japan Securities Scholarship Foundation, 2001-2004

Publication list

- [1] Tytus Wojtara, Makoto Sasaki, Hitoshi Konosu, Masashi Yamashita, Shingo Shimoda, Fady ALNAJJAR and Hidenori Kimura, "Artificial Balancer - Supporting Device for Postural Reflex", *Gait and Posture*, to be published
- [2] Shingo Shimoda and Hidenori Kimura, "Bio-mimetic Approach to Tacit

- Learning based on Compound Control", *IEEE Transactions on Systems, Man, and Cybernetics-Part B*, Vol. 40, No. 1, pp.77-90, 2010
- [3] Tytus Wojtara, Masafumi Uchihara, Hideyuki Murayama, Shingo Shimoda, Satoshi Sakai, Hideo Fujimoto and Hidenori Kimura, "Human-Robot Collaboration in Precise Positioning of a Three-Dimensional Object", *Automatica*, Vol.45, pp333-342, 2009
- [4] Shingo Shimoda and Hidenori Kimura, "Neural Computation Scheme of Compound Control: Tacit Learning for Bipedal Locomotion", *Journal of Control, Measurement, and System Integration*, Vol. 1, No. 4, pp.275-283, 2008
- [5] Shingo Shimoda, Yoji Kuroda and Karl Iagnemma, "High-speed navigation of unmanned ground vehicles on uneven terrain using potential fields", *Robotica*, Vol.25, pp.409-424, 2007
- [6] Shingo Shimoda, Takashi Kubota and Ichiro Nakatani, "Attitude Control of Satellite with Two Wheels Considering Maneuver Path", *Transactions of the Society of Instrument and Control Engineer*, Vol. 41, No.10, 2005
- [7] Shingo Shimoda, Takashi Kubota and Ichiro Nakatani, "Proposal of New Mobility and Landing Experiment in Microgravity Environment", *The Japan Society for Aeronautical and Space Sciences*, Vol. 53, No. 614, pp.108-115, 2005
- [8] Shingo Shimoda, Takashi Kubota, Ichiro Nakatani, "Four-Wheel Hopping Robot with Attitude Control Mechanism", *Journal of Robotics and Mechatronics*, Vol.16 No.3, pp.319-326, 2004
- [9] Shingo Shimoda, Takashi Kubota and Ichiro Nakatani, "Proposal of New Mobility Using Spring Mechanism in Microgravity Environment", *Journal of the Robotics Society of Japan*, Vol.21 No.6, pp83-89, 2003
- [10] Yoshihiko Nakamura, Shingo Shimoda and Sanefumi Shoji, "Microgravity Rover using Electro-magnetic Action", *Journal of the Robotics Society of Japan*, Vol.19 No.4, pp.71-77, 2001