

Biomedical Robotics I

Date / Time Aug. 22 (Mon.), 2022 / 10:15-11:45

Room Room 513

Session Chair Bum No Ahn (*KITECH*)

[MoO1C.1]

10:15-10:30

Towards Humanoids using Personal Transporters: Learning to Ride a Segway from Humans

Vidyasagar Rajendran, Jonathan Feng-Shun Lin, and Katja Mombaur

[MoO1C.2]

10:30-10:45

Reinforcement Learning Based CPG Controller for a Soft Gastropod Robot and its Gaits Comparison Study

Wenci Xin, Wing Yin Ng, Flippy Tianle Pan, Yehui Li, Philip Wai Yan Chiu, and Zheng Li

[MoO1C.3]

10:45-11:00

Change in Muscle Synergies during Stairmill Ascent with External Forces on the Pelvis

Biing-Chwen Chang and Sunil K. Agrawal

[MoO1C.4]

11:00-11:15

Modulation of Prosthetic Ankle Plantarflexion through Direct Myoelectric Control of a Subject-Optimized Neuromuscular Model

Tony Shu, Christopher Shallal, Ethan Chun, Aashini Shah, Angel Bu, Daniel Levine, Seong Ho Yeon, Matthew Carney, Hyungeun Song, Tsung-Han Hsieh, and Hugh M. Herr

[MoO1C.5]

11:15-11:30

Effectiveness of a Passive Neck Support Mechanism for Overhead Occupational Tasks

Marco Rossini, Sander De Bock, Vincent Ducastel, Kevin Langlois, Kevin De Pauw, Joost Geeroms, Carlos Rodriguez-Guerrero, and Dirk Lefeber

[MoO1C.6]

11:30-11:45

Evaluation of Human Body Balance Ability through Geometric Solution based on an Equivalent Model using an RGB Camera

Hang Thi Phuong Nguyen, Yeongju Woo, Choonsung Shin, and Hieyong Jeong