

## 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