

RAL Award Talks

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| Date / Time | Aug. 23 (Tue.), 2022 / 14:00-15:30 |
| Room | Room 515 |
| Session Chair | Elliott J. Rouse (<i>University of Michigan</i>) |

[TuO2B.1]

14:00-14:15

Predicting Sagittal-Plane Swing Hip Kinematics in Response to Trips

Shannon M. Danforth, Xinyi Liu, Martin J. Ward, Patrick D. Holmes, and Ram Vasudevan

[TuO2B.2]

14:15-14:30

Enhancing Gait Assistance Control Robustness of a Hip Exosuit by Means of Machine Learning

Xiaohui Zhang, Enrica Tricomi, Francesco Missiroli, Nicola Lotti, Casimir Bokranz, Daniela Nicklas, and Lorenzo Masia

[TuO2B.3]

14:30-14:45

Is a Robot Needed to Modify Human Effort in Bimanual Tracking?

Nuria Peña Perez, Jonathan Eden, Ekaterina Ivanova, Etienne Burdet, and Ildar Farkhatdinov

[TuO2B.4]

14:45-15:00

Immediate Biomechanical Effects of Providing Adaptive Assistance with an Ankle Exoskeleton in Individuals After Stroke

Jesús de Miguel-Fernández, Camille Pescatore, Alba Mesa-Garrido, Cindy Rikhof, Erik Prinsen, Josep M. Font-Llagunes, and Joan Lobo-Prat

[TuO2B.5]

15:00-15:15

Ecological Validation of Machine Learning Models for Spatiotemporal Gait Analysis in Free-Living Environments using Instrumented Insoles

Ton T. H. Duong, David Uher, Jacqueline Montes, and Damiano Zanotto

[TuO2B.6]

15:15-15:30

Thumb Stabilization and Assistance in a Robotic Hand Orthosis for Post-Stroke Hemiparesis

Ava Chen, Lauren Winterbottom, Sangwoo Park, Jingxi Xu, Dawn M. Nilsen, Joel Stein, and Matei Ciocarlie