

Biofeedback and Sensors

Date / Time	Aug. 24 (Wed.), 2022 / 10:00-11:30
Room	Room 513
Session Chair	Charmayne M.L. Hughes (<i>San Francisco State University</i>)

[WeO1C.1]

10:00-10:15

Effects of Localized Leg Muscle Vibration Timed to Gait Cycle Percentage during Overground Walking

Antonio Prado and Sunil K. Agrawal

[WeO1C.2]

10:15-10:30

ErgoTac-Belt: Anticipatory Vibrotactile Feedback to Lead Centre of Pressure during Walking

Marta Lorenzini, Juan M. Gandarias, Luca Fortini, Wansoo Kim, and Arash Ajoudani

[WeO1C.3]

10:30-10:45

Gait Analysis with an Integrated Mobile Robot and Wearable Sensor System Reveals Associations Between Cognitive Ability and Dynamic Balance in Older Adults

Qingya Zhao, Zhuo Chen, Corey D. Landis, Ashley Lytle, Ashwini K. Rao, Yi Guo, and Damiano Zanotto

[WeO1C.4]

10:45-11:00

An AI -Based Model for Texture Classification from Vibrational Feedback: Towards Development of Self-Adapting Sensory Robotic Prosthesis

Morenike Magbagbeola, Mark Miodownik, Stephen Hailes, and Rui C. V. Loureiro

[WeO1C.5]

11:00-11:15

Design and Evaluation of an IMU Sensor-Based System for the Rehabilitation of Upper Limb Motor Dysfunction

Bao Tran, Xiaorong Zhang, Amir Modan, and Charmayne M.L. Hughes

[WeO1C.6]

11:15-11:30

CyberCoach: A Wearable Biofeedback System for Runners

Matthew R. Gibson, Richard J. Boergers, and Damiano Zanotto