

Deriving accurate 3D marker positions and joint kinematics from videopose detection algorithms

Antoine Falisse, Scott Uhlrich, Michael Ko, Akshay Chaudhari, Jennifer Hicks, Scott Delp, Łukasz Kidziński

- Session: Machine Learning and Pose Estimation
- Date: 11 July 2022 (Mon.)
- Time: Taipei Time (UTC+8) 13:40-15:10

Kinematics from at-home smartphone videos of sit-to-stand tests relate to clinically relevant health information: a self-guided nationwide biomechanics study

Melissa Boswell, Scott Uhlrich, Antoine Falisse, Jennifer Hicks, Scott Delp, Łukasz Kidziński

- Session: 9th WCB 2022 Young Researcher (Pre-Doctoral) Awards
- Date: 11 July 2022 (Mon.)
- Time: Taipei Time (UTC+8) 13:40-15:10

OpenCap: open-source software for estimating three-dimensional kinematics and kinetics of human movement from smartphone videos

Scott Uhlrich, Antoine Falisse, Michael Ko, Akshay Chaudhari, Jennifer Hicks, Scott Delp, Łukasz Kidziński

- Session: Mobile Monitoring of Human Movement
- Date: 11 July 2022 (Mon.)
- Time: Taipei Time (UTC+8) 13:40-15:10

How connecting the legs with a spring reduces the energetic cost of running

Jon Stingel, Jennifer Hicks, Cara Welker, Scott Delp

- Session: Inverse Problems and Parameter Identification
- Date: 11 July 2022 (Mon.)
- Time: 15:30-17:00

Joy Ku is moderating the Teaching with the OpenSim Neuromuscular Biomechanics Software session, 12 July 2022 (Tue.), Taipei Time (UTC+8) 13:40-15:10

The future of movement analysis: Bridging disciplines to improve access, adherence, and analysis of mobile biomechanical tools

Melissa Boswell and Brian Davis

- Session: ISB 50 Years of International Biomechanics: contributions to instruments and techniques
- Date: 13 July 2022 (Wed.)
- Time: Taipei Time (UTC+8): 09:50-11:20

A minimal set of inertial measurement units detects clinically relevant metrics of freezing of gait in individuals with Parkinson's disease

Kirsten Seagers, Johanna O'Day, Marissa Lee, Shannon Hoffman, Łukasz Kidziński, Helen Bronte-Stewart, Scott Delp

- Session: Artificial Intelligence and Machine Learning in Biomechanics 1
- Date: 13 July 2022 (Wed.)
- Time: Taipei Time (UTC+8) 09:50-11:20

Accelerating AI for Biomechanics through Data and Software Sharing

Jennifer Hicks, Melissa Boswell, Antoine Falisse, Łukasz Kidziński, Scott Uhlrich, Keenon Werling, Karen Liu, Scott Delp

- Session: Emerging Technologies to Analyze Human Motion
- Date: 13 July 2022 (Wed.)
- Time: Taipei Time (UTC+8) 13:40-15:10

Kinematics from at-home smartphone videos of sit-to-stand tests relate to clinically relevant health information: a self-guided nationwide biomechanics study

Melissa Boswell, Scott Uhlrich, Antoine Falisse, Jennifer Hicks, Scott Delp, Lukasz Kidzinski

- Session: Emerging Technologies to Analyze Human Motion
- Date: 13 July 2022 (Wed.)
- Time: Taipei Time (UTC+8) 13:40-15:10

Women in Biomechanics Mentorship Panel

Panelists: Eni Halilaj, Laura-Anne Furlong, Lauren Welte, Silvia Belmker

Facilitators: Melissa Boswell, Ashley Collimore, Katie Knaus, Hannah O'Day, Stephanie Ross, Rachel Teater

- Session: Women in Biomechanics
- Date: 14 July 2022 (Thurs.)
- Time: Taipei Time (UTC+8) 08:00-09:30