Thomas ROBERT

Researcher in Biomechanics
LBMC, Université Gustave Eiffel
25 av. François Mitterrand
69 675 BRON Cedex – FRANCE
+33 (0) 4 72 14 23 93
thomas.robert@univ-eiffel.fr
Orcid: 0000-0002-6502-7082

Education and research experiences

2019	« Habilitation à diriger les Recherche », *Université Claude Bernard Lyon 1*.
2017	Visiting researcher at *Ecole de Technologie Supérieure de Montréal* (Canada)
Since 2008	Researcher at LBMC UMR_T9406 at *IFSTTAR (aka. Univ. Gustave Eiffel since 2020)*
2008	Visiting researcher, University of Virginia (Charlottesville, USA)
2007	Postdoctoral researcher, Pennsylvania State University, State College (United States)
2006	PhD in Biomechanics, National Institute of Applied Sciences, Lyon (France)
2002	MSc in Mechanics, National Institute of Applied Sciences, Lyon (France)

Research Activities

Researcher in analysis and simulation of Human movement, with a specific focus on balance and falls
Co-Head of the "Facilitating Travel" research theme of the LBMC (since 2019)
Member of the Board of the *Société de Biomécanique* (since 2017)
Former Member of the Researchers evaluation committee of the Ministry for the Ecological and Inclusive Transition (2011-2019) and of the Scientific Committee of IFSTTAR (2012-2016)
Principal investigator in grants from the European Commission (Marie Skłodowska-Curie Actions programme Prestige Post-doc), French National Research Agency (ANR Young Researcher Grant), and Région Rhône-Alpes, and research contracts with public/governmental agencies (SNCF, STRMTG, DGITM).
Scientific expertise: Reviewers for scientific journals (Journal of Biomechanics, Gait & Posture, Frontiers in Neurosciences …), PhD jury member (10 PhDs), expert for regional and national research funding agencies.

Supervision

10 PhD (7 soutenues et 3 en cours), 7 research engineers / postdocs

Publications

Bibliometry : ~ 50 documents referenced in databases (Scopus), h-index = 15, ~600 citations
Sélections de publications

- Lahkar, B. K., Muller, A., Dumas, R., Reveret, L., Robert, T. Accuracy of a markerless motion capture system in estimating upper extremity kinematics during boxing. Frontiers in Sports and Active Living (In Press). doi: 10.3389/fspor.2022.939980.
- Abiad, N.A., Kone, Y., Renaudin, V., Robert, T. Smartstep: A Robust STEP Detection Method Based on SMARTphone Inertial Signals Driven by Gait Learning. IEEE Sensors Journal, 2022, 22(12), pp. 12288–12297
- Ankle, hip and stepping strategies for humanoid balance recovery with a single Model Predictive Control scheme Z Aftab, T Robert, PB Wieber 2012 12th IEEE-RAS International Conference on Humanoid Robots (Humanoids 2012), 159-164.
- Robert, T., Zatsiorsky, V.M., Latash, M.L. Multi-muscle synergies in an unusual postural task: quick shear force production, Experimental Brain Research,187,2,237-253, 2008.