

CURRICULUM VITAE



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EDUCATION:

- **PhD** : April 2019, Istanbul Technical University and University of Michigan, Controls Engineering
- **M.Sc.** : June 2008, Istanbul Technical University, Mechatronics Engineering
- **B.Sc.** : June 2005, Istanbul Technical University, Electronics Engineering

PROFESSIONAL EXPERIENCE:

- 2019-2022, Post-Doctoral Researcher, University of Calgary, Faculty of Kinesiology
- 2016-2019, visitor PhD student, University of Calgary, Faculty of Kinesiology
- 2012-2016, visitor PhD student, University of Michigan, Mechanical Engineering
- 2008-2012, senior researcher, TUBITAK BILGEM, Kocaeli, Turkey
- 2006-2008, research engineer, Beko Electronics, Istanbul, Turkey

PUBLICATIONS

- **Osman Darici**, Arthur D. Kuo, 2023, Humans plan for the near future to walk economically on uneven terrain, *PNAS*, accepted. <https://arxiv.org/abs/2207.11224>
- **Osman Darici**, Arthur D. Kuo, 2022. Humans optimally anticipate and compensate for an uneven step during walking, *eLife*. <https://doi.org/10.7554/eLife.65402>.
- **Osman Darici**, Hakan Temeltas, Arthur D. Kuo, 2019. Anticipatory Control of Momentum for Bipedal Walking on Uneven Terrain, *Scientific Reports*. <https://www.nature.com/articles/s41598-019-57156-6>
- **Osman Darici**, Hakan Temeltas, Arthur D. Kuo, 2018. Optimal regulation of bipedal walking speed despite an unexpected bump in the road, *PLOS ONE*, 13, e0204205. <https://doi.org/10.1371/journal.pone.0204205>

- **Osman Darici**, Daniel Hodgson, Sarah Ajao, Taha Butt, Arthur D. Kuo, Ryan Peters, 2021. The Effect of Postural Task on Lower-Limb Reflex Excitability, Society for Neuroscience, Chicago, USA.
- **Osman Darici**, Hakan Temeltas, Arthur D. Kuo, 2018: An amazingly simple control method to regulate walking speed on uneven terrain, Dynamic Walking, Pensacola, Florida, USA.
- **Osman Darici**, Hakan Temeltas, Arthur D. Kuo, 2017: Anticipatory Speed Changes for Optimal Human Walking on Uneven Terrain, International Society of Biomechanics.
- **Osman Darici**, Hakan Temeltas, Arthur D. Kuo, 2017: Mechanical Consequences of Stepping on an Unanticipated Bump While Walking, International Society of Biomechanics.
- **Osman Darici**, Hakan Temeltas, Arthur D. Kuo, 2015: The Effect of Step Height Perturbation on Human Gait, American Society of Biomechanics.
- **Osman Darici**, Hakan Temeltas, Arthur D. Kuo, 2015: Beware of the bump: Optimal strategy to traverse a step height perturbation, Dynamic Walking
- **Osman Darici**, Hakan Temeltas, Arthur D. Kuo, 2013: The Effect of Step Height Disturbance on Step to Step Transitions of Human Walking, Dynamic Walking,

OTHER PUBLICATIONS, PRESENTATIONS AND PATENTS:

- **Osman Darici**, Hakan Temeltas, 2013: Sliding Mode Control of The Simplest Walking Model", International Conference on Advanced Robotics.
- M. Kursat Yalcin, **Osman Darici**, Hakan Temeltas, 2010: A New Path Tracking Method for Quadruped Robots: Weingarten Maps, International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines.
- **Osman Darici**, M. Kursat Yalcin, Hakan Temeltas, 2008: Comparison of Gait Generation Methods in Quadruped Walking, IEEE/ASME International Conference on Advanced Intelligent Mechatronics.