# DAEGYU LIM

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#### **EDUCATION**

• Ph.D Candidate in Transdisciplinary Studies Seoul National University, Seoul, Republic of Korea Mar. 2017 - Present

• BA in Mechanical and Aerospace Engineering Seoul National University, Seoul, Republic of Korea Mar. 2012 - Feb. 2017

## **PUBLICATIONS**

- Myeong-Ju Kim, **Daegyu Lim**, Gyeongjae Park, and Jaeheung Park. "Foot Stepping Algorithm of Humanoids with Double Support Time Adjustment based on Capture Point Control." 2023 IEEE International Conference on Robotics and Automation (ICRA). IEEE, 2023.
- Myeong-Ju Kim, **Daegyu Lim**, Gyeongjae Park, and Jaeheung Park. "Humanoid Balance Control using Centroidal Angular Momentum based on Hierarchical Quadratic Programming." 2022 IEEE/RSJ international conference on intelligent robots and systems (IROS). IEEE, 2022.
- Daegyu Lim, Donghyeon Kim, Jaeheung Park. "Online Telemanipulation Framework on Humanoid for both Manipulation and Imitation" 2022 19th International Conference on Ubiquitous Robots (UR). IEEE, 2022. (\*Best Application Paper Award)
- Donghyeon Kim\*, Daegyu Lim\*, and Jaeheung Park. "Transferable Collision Detection Learning for Collaborative Manipulator Using Versatile Modularized Neural Network." *IEEE Transactions* on Robotics (2021). (\*equal contribution)
- Daegyu Lim\*, Donghyeon Kim\*, Jaeheung Park. "Momentum Observer-Based Collision Detection Using LSTM for Model Uncertainty Learning." 2021 IEEE International Conference on Robotics and Automation (ICRA). IEEE, 2021. (\*equal contribution)
- Mingon Kim, **Daegyu Lim**, and Jaeheung Park. "Online walking pattern generation for humanoid robot with compliant motion control." 2019 International Conference on Robotics and Automation (ICRA). IEEE, 2019.

### PATENTS

• Jaeheung Park, **Daegyu Lim**, Donghyeon Kim, "Remote control method of motion tracking robot", Korea Patent Application 1020210191286, filed December 2021. Patent Pending.

# AWARDS

• Best Application Paper Award in the 19th International Conference on Ubiquitous Robots (UR 2022).

#### **SCHORLARSHIP**

- Samsung Electronics Ph.D Student Sponsorship Program at Device Solutions (2022. 09).
- National Science & Technology Scholarship (2013-2014).

#### RESEARCH SKILLS

Computer Languages C/C++, Python, Matlab

Simulator MuJoCo, Isaac Gym, CoppeliaSim

Library Pytorch, Tensorflow, RBDL, qpOASES, Pinocchio