Jeeseop Kim

Contact Information

310 Goodwin Hall, Virginia Tech
Blacksburg, VA 24060, USA

https://jeeseop.github.io
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Education

Ph.D. Candidate in Mechanical Engineering — September 2017 - Expected in 2022
advisor: Prof. Kaveh Akbari Hamed
Virginia Polytechnic Institute and State University, USA

M.S. in Transdisciplinary Studies (Intelligent Systems) — March, 2017
advisor: Prof. Jaeheung Park
Seoul National University, South Korea

B.S. in Mechanical and Aerospace Engineering — March, 2014
Seoul National University, South Korea

Research Experience

Graduate Research Assistant
funded project from National Science Foundation (NSF) — 2019 - Present
Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA
Advisor: Prof. Kaveh Akbari Hamed

funded project from Office of Naval Research (ONR) — 2017 - 2019
Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA
Advisor: Prof. Tomonari Furukawa

funded project from Mahindra & Mahindra — 2018 - 2019
Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA
Advisor: Prof. Tomonari Furukawa

participating MBZIRC 2020 — 2018 - 2019
Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA
Advisor: Prof. Tomonari Furukawa

funded project from National Research Foundation of Korea — 2015 - 2017
Dept. of Transdisciplinary Studies, Seoul National University, South Korea
Advisor: Prof. Jaeheung Park

funded project from Samsung — 2014 - 2017
Dept. of Transdisciplinary Studies, Seoul National University, South Korea
Advisor: Prof. Jaeheung Park

participating DARPA Robotics Challenge (DRC final) — 2014 - 2015
Dept. of Transdisciplinary Studies, Seoul National University, South Korea
Advisor: Prof. Jaeheung Park

Research Intern
Dynamic Robotic Systems Lab, Seoul National University, South Korea — 2013
Supervisor: Prof. Jaeheung Park

Biorobotics Lab, Seoul National University, South Korea 2012
Supervisor: Prof. Kyu-Jin Cho

Teaching Experience

Teaching Assistant
Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA
ME5524: Bayesian Robotics
ME5984: SS:Advanced Experimental Robotics

Dept. of Transdisciplinary Studies, Seoul National University, South Korea
493.601: Convergent Robotics Technology
493.611: Dynamics and Control of Robot-Environment Interaction

Technical skills

Operating Systems: Ubuntu(Linux), ROS, Windows
Programming Language: C/C++, Python, MATLAB, LaTeX
Programming Libraries: Eigen Library, RBDL, Boost
Design and Simulation Software: Solidworks, Unigraphics(NX), Cura
Others: 3D printing, Machine shop

Patent

Jeeseop Kim, *et al.* Automatic cardiopulmonary resuscitation device and control method therefor, 2019. No. 20190029919A1 (US Patent), No. 108697572A (CN Patent), No. 3409258A1 (EU Patent)

Jeeseop Kim, *et al.* Apparatus for Automatic Cardiovascular Pulmonary Resuscitation, 2016. Korea Patent No.10-2016-0172286.

International Journal Articles

K. A. Hamed, **J. Kim**, A. Pandala. Quadrupedal Locomotion via Event-Based Predictive Control and QP-Based Virtual Constraints, IEEE Robotics and Automation Letters, Vol. 5, No. 3, pp. 4463-4470, 2020.07

J. Kim, Y. Omori, A. Sifat, and T. Furukawa. Adjustably Designed Torque Controlled Humanoid Platform, International Journal of Mechanical and Production Engineering, Vol. 7, No. 2, pp. 52-57, 2019.05

International Conference Articles

J. Kim, Y. Omori, A. Sifat, and T. Furukawa. Adjustably Designed Torque Controlled Humanoid Platform, International Conference on Control, Automation, Robotics and Vision Engineering, Washington DC, USA, 21-22 Nov, 2018.

J. Kim, M. Kim, and J. Park. Improvement of Humanoid Walking Control by Compensating Actuator Elasticity, International Conference on Humanoid Robots, Cancun, Mexico, 15-17 Nov, 2016.

J. Jung, **J. Kim**, S. Kim, W. Kwon, S. Na, K. Kim, J. Lee, G. Suh, and J. Park. Application of Robot Manipulator for Cardiopulmonary Resuscitation, International Symposium on Experimental Robotics, Tokyo, Japan, 3-6 Oct, 2016.

Domestic Conference Articles

J. Kim, M. Kim, and J. Park, Improvement of Humanoid gait stability using reduction gear deformation model, The 31st Institute of Control, Robotics and Systems (ICROS), Korea, 2016.

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