Jeeseop Kim

CONTACT INFORMATION	310 Goodwin Hall, Virginia Tech Blacksburg, VA 24060, USA	jeeseop.com jeeseop@vt.edu
Education	Ph.D. Candidate in Mechanical Engineering advisor: Prof. Kaveh Akbari Hamed Virginia Polytechnic Institute and State University, USA	September 2017 - Expected in 2022
	M.S. in Transdisciplinary Studies (Intelligent Systems) advisor: Prof. Jaeheung Park Seoul National University, South Korea	March, 2017
	B.S. in Mechanical and Aerospace Engineering Seoul National University, South Korea	March, 2014
RESEARCH EXPERIENCE	Graduate Research Assistant funded project from National Science Foundation (NSF) Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA Advisor: Prof. Kaveh Akbari Hamed	2019 - Present
	funded project from Office of Naval Research (ONR) Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA Advisor: Prof. Tomonari Furukawa	2017 - 2019
	funded project from Mahindra & Mahindra Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA Advisor: Prof. Tomonari Furukawa	2018 - 2019
	participating MBZIRC 2020 Dept. of Mechanical Engineering, Virginia Tech, Blacksburg, USA Advisor: Prof. Tomonari Furukawa	2018 - 2019
	funded project from National Research Foundation of Korea Dept. of Transdisciplinary Studies, Seoul National University, South Korea Advisor: Prof. Jaeheung Park	2015 - 2017
	funded project from Samsung Dept. of Transdisciplinary Studies, Seoul National University, South Korea Advisor: Prof. Jaeheung Park	2014 - 2017
	participating DARPA Robotics Challenge (DRC final) Dept. of Transdisciplinary Studies, Seoul National University, South Korea Advisor: Prof. Jaeheung Park	2014 - 2015
	Research Intern Dynamic Robotic Systems Lab, Seoul National University, South Korea Supervisor: Prof. Jaeheung Park	2013

Supervisor: Prof. Kyu-Jin Cho

Teaching

Teaching Assistant

EXPERIENCE

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.

PEER-REVIEWED JOURNAL ARTICLES R. T. Fawcett, A. Pandala, J. Kim, and K. Akbari Hamed, Real-time planning and nonlinear control for quadrupedal locomotion with articulated tails, ASME Journal of Dynamic Systems, Measurement, and Control, Accepted to appear, Jan, 2021.

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, Jul, 2020.

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, May, 2019.

PEER-REVIEWED CONFERENCE ARTICLES **J. Kim**, M. Kim, and J. Park, Improvement of Humanoid Walking Control by Compensating Actuator Elasticity, International Conference on Humanoid Robots (ICHR), 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 (ISER), Tokyo, Japan, 3-6 Oct, 2016.

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), Seoul, Korea, 10-11 Mar, 2016.