
		■ Contact information Professor : Hyun Myung TEL : 042-350-7451 Lab. : Urban Robotics Lab TEL : 042-350-7551 Website : https://urobot.kaist.ac.kr/
■ Current state of the Lab. (in 2025 Spring Semester) Postdoctoral Fellows: 1 PhD Students: 34 Master's Student: 12		
■ Research Areas <ul style="list-style-type: none">Autonomous robot navigation (SLAM, self-driving car, mobile robot, legged robot, drone, etc.)Spatial artificial intelligence & Machine learningIntelligent robotsMonitoring & inspection for smart citiesSwarm robots		
■ Recommended courses & Career after graduation <ul style="list-style-type: none">Recommended courses: EE381, EE581, EE585Career after graduation: Robotic researcher for gov. research institutes, industries (Samsung Elec., Hyundai Motor Company, Naver labs, etc.); Professor in academia		■ Introduction to other activities besides research <ul style="list-style-type: none">Summer/winter workshopLab tourStrawberry party
■ Introduction to the Lab. <p>Our lab focuses on the research and development of robotics technologies for smart cities. The research fields include autonomous robot navigation, spatial AI, machine learning, monitoring, inspection, control, and rehabilitation for smart cities and civil infrastructures. We also deal with big data informatics supporting sensing, analysis, and design activities needed to construct and operate smart and sustainable built environments.</p> 		
■ Recent research achievements ('23~'25) <ul style="list-style-type: none">Published Journal/Conference Papers 2025 (published paper: 16)<ul style="list-style-type: none">Dongkyu Lee, I Made Aswin Narendra, Minho Oh, Byeongho Yu, and Hyun Myung†, "TRG-planner: Traversal Risk Graph-Based Path Planning in Unstructured Environments for Safe and Efficient Navigation," <i>IEEE Robotics and Automation Letters</i>, Feb. 2025.Kihwan Ryoo, Hyungtae Lim, and Hyun Myung†, "MambaGlue: Fast and Robust Local Feature Matching With Mamba," in <i>Proc. IEEE Int'l Conf. on Robotics and Automation (ICRA)</i>, Atlanta, USA, May 2025.2024 (published paper: 25)<ul style="list-style-type: none">Hyungtae Lim, Beomsoo Kim, Daebeom Kim, Eungchang Mason Lee, and Hyun Myung†, "Quatro++: Robust Global Registration Exploiting Ground Segmentation for Loop Closing in LiDAR SLAM," <i>International Journal of Robotics Research</i>, Apr. 2024.Changki Sung, Wanhee Kim, Jungho An, WooJu Lee, Hyungtae Lim, and Hyun Myung†, "Contextrast: Contextual Contrastive Learning for Semantic Segmentation," in <i>Proc. The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2024)</i>, Seattle, USA, Jun. 2024.Wooju Lee, Dasol Hong, Hyungtae Lim†, and Hyun Myung†, "Object-Aware Domain Generalization for Object Detection," in <i>Proc. AAAI Conference on Artificial Intelligence (AAAI 2024)</i>, Vancouver, Canada, Feb. 2024.2023 (published paper: 45)<ul style="list-style-type: none">Hyungtae Lim, Lucas Nunes, Benedikt Mersch, Xieyuanli Chen, Jens Behley, Hyun Myung†, and Cyrill Stachniss, "ERASOR2: Instance-Aware Robust 3D Mapping of the Static World in Dynamic Scenes," in <i>Proc. Robotics: Science and Systems (RSS 2023)</i>, Daegu, Korea, Jul. 2023.I Made Aswin Narendra, Byeongho Yu, and Hyun Myung†, "DreamWaQ: Learning Robust Quadrupedal Locomotion With Implicit Terrain Imagination via Deep Reinforcement Learning," in <i>Proc. IEEE Int'l Conf. on Robotics and Automation (ICRA)</i>, London, UK, May 2023.Awards<ul style="list-style-type: none">First place overall at NSS (Nothing Stands Still) Challenge, IEEE International Conference on Robotics and Automation (ICRA), Atlanta, 2025.Second place in overall at Quadruped Robot Challenge (QRC), IEEE ICRA, Atlanta, US, 2025.Second place in autonomous at Quadruped Robot Challenge (QRC), IEEE ICRA, Yokohama, Japan, 2024.First place overall at Quadruped Robot Challenge (QRC) hosted at the IEEE ICRA, London, UK, 2023.First place overall in LiDAR session & first place in academia (second place) in the vision-only session at HILTI SLAM Challenge held at IEEE ICRA, London, UK, 2023.The only one to complete the entire course and win a prize in the autonomous flight technology contest hosted by the Defense Acquisition Program Administration and Daejeon City, sponsored by the Agency for Defense Development and Daejeon Techno Park, 2023.		