

WORK EXPERIENCE

2020-Present **Samsung Electronics Co., Ltd.**, *Research Engineer*, System LSI Business

EDUCATION

2018-2020 **Seoul National University**, *M.S.*, Department of Transdisciplinary Studies, The Graduate School of Convergence Science and Technology

Lab: Dynamic Robotic System Lab (DYROS Lab, <https://dyros.snu.ac.kr>)

Advisor: Prof. Jaeheung Park (park73@snu.ac.kr)

Thesis: Parking Line Based SLAM Approach for Localization and Parking Space Detection

2010-2018 **Kookmin University**, *B.S.*, Automotive Engineering

Activity: Team Member of Student Formula Racing Team and Participated in FSAE 2014 Competition.

TEACHING EXPERIENCE

2024-Present **KETI**, *SLAM Instructor*, Korea Electronics Technology Institute

2023-Present **Youtube**, *SLAM-related Contents*, Channel Name: ALIDA

2018 **Robotics Boot Camp**, *ROS Instructor*, Seoul National University, DYROS Laboratory

2017 **CATIA and CAD**, *Instructor*, Kookmin University

SKILLS

Expertise SLAM, Visual Odometry, Visual Inertial Odometry

Programming C++, Python

Libraries ROS, Eigen3, ceres, g2o, OpenCV, PCL

PUBLICATIONS

2023 **Gyubeom Im**, Keunjoo Park, Junseok Kim, Bongki Son, Seungchul Shin, Haechang Lee. "Live Demonstration: PINK: Polarity-based Anti-flicker for Event Cameras." Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops. 2023.

2019 **Gyubeom Im**, Minsung Kim, Jaeheung Park, "Parking Line Based SLAM Approach Using AVM/LiDAR Sensor Fusion for Rapid and Accurate Loop Closing and Parking Space Detection", *Sensors*, 19 (21), pp. 4811, 2019, ISSN: 1424-8220.

2019 Kyujin Park, **Gyubeom Im**, Minsung Kim, Jaeheung Park, "Parking Space Detection based on Camera and LIDAR Sensor Fusion", *Journal of Korea Robotics Society*, 14 (3), pp. 170-178, 2019, ISBN: 1975-6291.

2018 **Gyubeom Im**, Minsung Kim, Joonwoo Ahn, Minsoo Kim, Jaeheung Park, "V-Rep Simulator for Autonomous Vehicle Research in Parking lot Environment", The Korean Society of Automotive Engineers Annual Autumn Conference, Kangwon, Korea, 14.11.2018.

2018 Minsung Kim, **Gyubeom Im**, Joonwoo Ahn, Minsoo Kim, Jaeheung Park, "Autonomous parking algorithm using automatic selection of forward and backward switching points via model predictive control", The Korean Society of Automotive Engineers Annual Autumn Conference, Kangwon, Korea, 14.11.2018.

2018 Joonwoo Ahn, Minsoo Kim, **Gyubeom Im**, Minsung Kim, Jaeheung Park, "Development of Autonomous Valet Parking System and Simulation Result", The Korean Society of Automotive Engineers Annual Autumn Conference, Kangwon, Korea, 14.11.2018.

AWARDS

- 2020 Best Paper Award of Master Thesis in Graduate School, Seoul National University
- 2017 Kookmin University Scholarship
- 2017 Kookmin University Scholarship
- 2016 Kookmin University Scholarship
- 2015 Kookmin University Scholarship
- 2014 2nd Place in Cost Section, FSAE 2014
- 2014 18th Place (1st Prize among the Asia Teams) in Total Performance, FSAE 2014