

YeongGwang Son

Sungkyunkwan University
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EDUCATION

Mar. 2015 ~ Feb. 2021	Halla University Department of Mechanical Engineering <i>B.S. in Mechanical Engineering</i> GPA: 4.5 / 4.5	Wonju, Korea
Mar. 2021 ~ Present	Sungkyunkwan University Department of Mechanical Engineering <i>Advisor: Hyouk Ryeol Choi</i> <i>Ph.D. Student</i> GPA: 4.27 / 4.5	Suwon, Korea

RESEARCH INTERESTS

- Computer Vision for Robotic Grasping and Manipulation

EXPERIENCE

- Mando - EBS R&D Center, Seongnam-si, Gyeonggi-do, South Korea (Intern)
Period: 2019.03 ~ 2019.06
Task: Validation of modules for the electronic brake system
- AIDIN - Cobot Solution Team, Anyang-si, Gyeonggi-do, South Korea (Research Student)
Period: 2022.05 ~ Present
Task: Development of vision system for Robotic Picking Solutions
Youtube Link: <https://youtu.be/ycWutZFoUBA?si=6-8mIPLtEFOhLhWG>

PUBLICATIONS (SCIE/ESCI)

1. **Yeong Gwang Son**, and Hyouk Ryeol Choi, *et al.*, "CoAS-Net: Context-Aware Suction Network with a Large-Scale Domain Randomized Synthetic Dataset", *IEEE ROBOTICS AND AUTOMATION LETTERS*, (2023)
2. Tat Hieu Bui, **Yeong Gwang Son**, Hyouk Ryeol Choi, *et al.*, "Deep learning based 6-DoF antipodal grasp planning from point cloud in random bin-picking task using single-view", *IEEE ROBOTICS AND AUTOMATION LETTERS*, (2023)
3. Issac Rhee, Chun Soo Kim, Heeyeon Jeong, Seunghwan Um, Seung Jae Moon, **Yeong Gwang Son**,

Yong Bum Kim, Ho Sang Jung, Hyouk Ryeol Choi, "Development of Adaptive Gripper Enhancing Power Grasp Range and Linearity", *IEEE ACCESS*, (2024)

4. Tat Hieu Bui, **Yeong Gwang Son**, Hyouk Ryeol Choi, *et al.*, "Enhancing Antipodal Grasping Modalities in Complex Environments Through Learning and Analytical Fusion", *IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING*, (2024)

CONFERENCES

1. **Yeong Gwang Son**, and Hyouk Ryeol Choi, *et al.*, "CoAS-Net: Context-Aware Suction Network with a Large-Scale Domain Randomized Synthetic Dataset", International Conference on Robotics and Automation (ICRA), Yokohama, Japan (May. 2024) - Oral

AWARDS AND HONORS

- (Best Extended Abstract) IROS 2024 Workshop (Benchmarking via Competitions in Robotic Grasping and, IEEE Robotics and Automation Society, United States (Oct. 2024)
- Kim Soon-Moon Scholarship, SungKyunKwan University, Korea (Nov. 2024)
- (Second Place) 9th Robotic Grasping of Manipulation Competition - Picking in Clutter, IEEE Robotics and Automation Society, United States (May. 2024)
- URP(Undergraduate Research Program) Excellence in Mentorship Scholarship (2021, 2022, 2023), SungKyunKwan University, Korea (Dec. 2021 ~ Jun. 2023)
- (Excellence Award) 2020 Student Creative Mobility Competition - Autonomous Driving, Korea Transportation Safety Authority, Korea (Nov. 2020)