YeongGwang Son

Sungkyunkwan University syoungk20@gmail.com +82) 010-2772-5391

EDUCATION

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

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)

- 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)
- 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

 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

- 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)
- (Excellence Award) 2020 Student Creative Mobility Competition Autonomous Driving, Korea Transportation Safety Authority, Korea (Nov. 2020)
- (Best Extended Abstract) IROS 2024 Workshop (Benchmarking via Competitions in Robotic Grasping and, IEEE Robotics and Automation Society, United States (Oct. 2024)