Kyoungyeon Choi

MECHANICAL ENGINEERING S.M. APPLICANT

264, Ichon-ro, Yongsan-gu, Seoul, Republic of Korea

☐ (+82) 10-5545-9416 | ✉ kenbaxter1221@gmail.com | ⌂ bestever-choi.github.io/

Research Interests

-Robotics, Robotic Manipulation,and Legged Robotics
-Dynamics and Control

Education

Seoul National University (SNU)   *Seoul, S.Korea*

B.S. IN MECHANICAL ENGINEERING   *Mar. 2015 - PRESENT*

- Cumulative GPA: 4.1/4.3 (Major: 4.19/4.3, Upper: 4.21/4.3)
- Two years of absence to fulfill military duty (Aug. 2017 - Jul. 2019)

ETH Zürich   *Zürich, Switzerland*

EXCHANGE STUDENT IN MECHANICAL ENGINEERING   *Aug. 2019 - Feb.2020*

- Global Leadership Program, College of Engineering SNU

Research Experience

Bachelor's Thesis Research   *Seoul, S.Korea*

ROBOTICS LABORATORY, SNU   *Mar. 2020 - Present*

- Advisor: Frank Chongwoo Park Prof.Dr.
- Thesis: Learning 6-dof grasping from partial point cloud embedding
- Developed a grasping policy that selects a successful 6-dof grasp pose from a VAE grasp generator

Semester Project   *Zürich, Switzerland*

ROBOTICS SYSTEMS LAB, ETH ZÜRICH   *Aug. 2019 - Jan. 2020*

- Advisor: Hutter, Marco Prof.Dr.
- Project paper: Recovery controller for ANYmal on various terrains
- Project webpage: https://bestever-choi.github.io/ANYmal-recovery/
- Developed recovery controller for the quadruped robot ANYmal, enabling ANYmal to recover and stand up on sloped terrains

Research Intern   *Seoul, S.Korea*

PHOTONICS DEVICE PHYSICS LABORATORY, YONESI UNIVERSITY   *Dec. 2016 - Feb. 2017*

- Advisor: Kyunghwan Oh Prof.Dr.
- Research Paper:Two-mode Fiber with a Reduced Mode Overlap for Uncoupled Mode-division Multiplexing in C+L Band
- Designed a fiber optic cable that reduces mode overlap in LP01 and LP11 modes

Publications

- Seongjin Hong, **Kyoungyeon Choi**, Yong Soo Lee, and Kyunghwan Oh, "Two-mode Fiber with a Reduced Mode Overlap for Uncoupled Mode-division Multiplexing in C+L Band", Current Optics and Photonics, Vol. 2, Issue. 3, June 25, 2018.

Extracurricular Activity

Sigma Intelligence   *Seoul, S.Korea*

MEMBER, SNU   *Jul. 2016 - Aug. 2017*

- A robotics group focused on designing robots and electronics devices
- Developed footsteps warning device using piezoelectric sensor with ROS

Teaching and Mentorship   *Seoul, S.Korea*

TEACHER   *Mar. 2015 - Aug. 2019*

- Taught and mentored middle/high school students Math and Physics for 4 years

Honors & Awards

Gwanak President Scholarship   *Seoul, S.Korea*

SNU Alumni Association   *Sep. 2015 - Present*

- Awarded for academic excellence
- Full-tuition, 7 semester

Global Leadership Program Scholarship   *Seoul, S.Korea*

College of Engineering, SNU   *Aug. 2019*

- Exchange semester at ETH Zürich

National Mathematics Competition   *Seoul, S.Korea*

Global Association For Gifted and Talented   *Nov. 2013*

- The first prize

Skills

Programming	Python, Matlab, Tensorflow, C, C++, ROS, LaTeX
3D CAD	SolidWorks
Robot Simulation	Raisim gym, Mujoco gym, PyRep
Physics Simulation	COMSOL Multiphysics

Other Experience

Seoul Metro Corporation   *Seoul, S.Korea*

Social service agent   *Aug. 2017 - Jul. 2019*

- Alternative military service
- Designed a CAD model for military purpose