Seungyeon Yoo

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EDUCATION

SEOUL NATIONAL UNIVERSITY   **Seoul, Korea | Sep. 2021 – Present**
Ph.D. Candidate at the Lab for Autonomous Robotics Research in Aerospace Engineering (GPA 4.04/4.3)
• Advisor: H. Jin Kim
• Research Interests: Robot AI, Vision-Based Navigation, Visual Learning
• Scholarship: BK Excellent Research Talent Fellowship

KOREA UNIVERSITY   **Seoul, Korea | Mar. 2014 – Feb. 2020**
B.S. in Mechanical Engineering (GPA 4.33/4.5)
• Scholarship: National Scholarship for Science and Engineering (merit-based, 4 years)
• Awards: Grand Prize, Capstone Design Competition (₩2.0M, 2017); Academic Excellence Award (2017)
• Certificates: Future Entrepreneurship Certificate; Next Generation Leader Training Certificate

PROFESSIONAL EXPERIENCES

SAMSUNG ADVANCED INSTITUTE OF TECHNOLOGY
Research Intern (Computer Vision Technology Unit at the AI Research Center)   **Suwon, Korea | Jul. 2023 – Sep. 2023**

SAMSUNG ELECTRONICS
Engineer (Manufacturing Core Technology Team at the Global Technology Center)   **Suwon, Korea | Mar. 2020 – Jul. 2021**

ILSA (DRIVER ASSISTANCE SYSTEM STARTUP TEAM)
Team Leader   **Seoul, Korea | Jan. 2018 – Jun. 2019**

EXTRACURRICULAR ACTIVITIES

INTERNATIONAL SPACE EDUCATION BOARD (ISEB)
Korea Representative Student   **Baku, Azerbaijan | Oct. 2023**

KOREA UNIVERSITY INTERNATIONAL STUDENT ASSISTANT (KUISA)
Personnel Leader / Group Leader   **Seoul, Korea | Feb. 2017 – Dec. 2017**

PROJECTS

HUMANOID ROBOT DEVELOPMENT FOR HUMAN-LIKE PERCEPTION, COMMUNICATION, AND LEARNING
Funded by Korea Ministry of Trade, Industry and Energy   **Jan. 2025 – Present**

LANGUAGE MODEL–DRIVEN INTERACTION AND SPATIAL LEARNING FOR PERSISTENT AUTONOMOUS ROBOT NAVIGATION
Funded by Samsung Science and Technology Foundation   **Jan. 2025 – Present**

AUTONOMOUS AND SWARM SYSTEMS USING VISION-AIDED NAVIGATION IN GNSS-DENIED AND JAMMING ENVIRONMENTS
Funded by Defense Acquisition Program Administration   **Jan. 2025 – Present**

LEARNING-BASED ROAD SURFACE CONDITION ESTIMATION FOR VEHICLE SLIP SUPPRESSION
Funded by Hyundai Motor Company   **Jan. 2023 – Dec. 2024**

AUTONOMOUS DRIVING–ASSISTIVE ROBOT FOR FOLDABLE WHEELCHAIRS
Funded by Korea Ministry of Science and ICT   **Aug. 2021 – Dec. 2022**

ADDITIONAL ACADEMIC BACKGROUND

KANGWON SCIENCE HIGH SCHOOL (Government-designated selective program for gifted students in science and engineering)

OTHER INFORMATION

Military Service: Sergeant, Republic of Korea Army, Mar. 2015 – Dec. 2016