

JUNGSEOK CHO

Email: cjse3178@gmail.com

Homepage: <https://jungduri.github.io/>

EDUCATION

Korea Advanced Institute of Science and Technology

Sep 2015 – Feb 2018

M.S. in The Cho Chun Shik Graduate School of Green Transportation

Area: Machine vision, Image processing, Optics

Advisor: Kyung-soo Kim

Cumulative GPA: 3.9/4.3

Thesis: Vision-based Real-time Welding Line Detection Algorithms for Automatic Welding Robot [3]

Projects:

- Development welding line tracking vision-based algorithm of LNG cargo welding robot (with HHI)
- Development vehicle body velocity sensor using Modulated Motion Blur
- Development automatic parking algorithm using single CCTV in scaled down environment

Inha University

Mar.2012 – Aug.2015

B.S. in Electronic Engineering

Cumulative GPA: 4.19/4.5 (First honor of fall graduation in Department of Electronic Engineering)

EMPLOYMENT

NAVERZ @ Seongnam, Korea

Feb 2022 – current

Researcher in Motion AI Team

NAVERZ is one of the most popular company in the realms of metaverse service since 2019, having 300 millions of users, who are distributed mainly south-east Asia and North America. By acquiring the AI team of PlaceA, teamed up the motion AI team, who has primary role has create as well as research and program the interface between the real world and metaverse service of Zepeto. Solved multiple problems by adapting multi-view camera to enhance a joint estimation result and to cover all invisible and occlusive area.

PLACE A(merged by NAVERZ) @ Seongnam, Korea

Mar 2021 – Feb 2022

Researcher in AI Team

PLACE A which was a AI-tech startup in Korea mainly developed image-based scaleable AI solutions that used in services related human motions. Invited to join as a Researcher, tasked with studying how to estimate human pose, including 2D, 3D joint coordinates and mesh level using deep learning. Having provided accurate, real-time and intuitive joint information to the users, with the team's model playing a pivotal role as a significant feature in one of the popular metaverse services. Moreover, participated in the research team to the interpretive learning model for the authenticity verification whether a certain product is authentic or not.

TMAX @ Seongnam, Korea

Aug 2018 – Mar 2021

Researcher in 2D Graphics Team in OS division

Tmax is the domestic hidden champion who develop their own products and lead the field of system software sectors such as database and middle ware, awarded by providing its product to Hyundai and multiple domestic bank companies. Joined as a Researcher in the 2D Graphics team developing the C++ based 2D graphic library for the logic of drawing and rendering objects and fonts as well as the conventional algorithms of image processing on TmaxOS and relevant. Analyzed and evaluated deep learning-based computing vision algorithms for various software products.

Hyundai Heavy Industry @ Ulsan, Korea

Aug 2018 – July 2019

Researcher in Automation Research Department

Hyundai Heavy Industry is the global leading shipbuilding company. Recruited as a Researcher to develop various automation robots to enhance plant productivity. Mainly contributed to develop an LNG tank welding robot that was part of the most important and sophisticated process throughout the LNG cargo shipbuilding process, Acquiring the certification from the shipowners and the classification society, necessary for the deployment of the robot into the factories.

AWARDS & GRANTS

- National Scholarship for master's program attended at KAIST, Spring 2016 – Fall 2017
- Hanjin Group Scholarship, Fall 2015
- Second place Campus Start-ups Competitions, Fall 2014
- Samsung Dream Class Scholarship, Spring 2014 – Fall 2015
- Academic Excellence Scholarship, top 3% of the department - Fall 2012 Spring 2013

SELECTED PAPERS

Minyoung Lee, **Jungseok Cho**, Kyung-Soo Kim, Soohyun Kim, “Modulated Motion Blur-based Vehicle Body Velocity and Pose Estimation using an Optical Image Modulator”, *IEEE Transactions on Vehicular Technology*, 2021

Jungseok Cho, “Vision-based Real-time Welding Line Detection Algorithms for Automatic Welding Robot”, *Master Thesis, KAIST*, 2018

Minyoung Lee, Kyung-Soo Kim, **Jungseok Cho**, Soohyun Kim “Development of a vehicle body velocity sensor using Modulated Motion Blur”, *IEEE International Conference on Advanced Intelligent Mechatronics (AIM)*, 2017

Jungseok Cho, Jinrak Park, Untae Baek, Donghyun Hwang, Seibum Choi, Soohyun Kim, Kyungsoo Kim “Automatic Parking System using Background Subtraction with CCTV Environment”, *International Conference on Control, Automation and Systems*, 2016

TECHNICAL STRENGTHS

Language	Korean (native), English(CEFR: B2(independent)-C1(proficient))
Platform	Linux, MCU Programming
Programming and etc.	C/C++, PyTorch, Tensorflow, OpenCV, Python, Typescript, Matlab, ROS, Git, etc.