# JUNGSEOK CHO

Email: cjse3178@gmail.com

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

#### EDUCATION

## Korea Advanced Institute of Science and Technology

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(95.55/100%)

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

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

Researcher in Motion AI Team

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

### PLACE A(merged by NAVERZ) @ Seongnam, Korea

Researcher in AI Team

PLACE A, an AI-tech startup in Korea, mainly developed image-based scaleable AI solutions that are used in services related to human motions. I joined as a Researcher, tasked with studying how to estimate human pose, including 2D, 3D joint coordinates, and mesh level using deep learning. PLACE A 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, I also participated in the research team on the interpretive learning model for authenticity verification of whether a specific product is authentic or not.

### TMAX @ Seongnam, Korea

Researcher in 2D Graphics Team in OS division

Tmax is the domestic hidden champion who leads the field of system software sectors such as database and middleware, awarded by providing its product to Hyundai and multiple domestic bank companies. I 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. I also conducted deep learning-based computing vision algorithms for various software products.

## Hyundai Heavy Industry @ Ulsan, Korea

Researcher in Automation Research Department

Hyundai Heavy Industry is the global leading shipbuilding company. I was recruited as a Researcher to develop various automation robots to enhance plant productivity. Mainly I contributed to developing an LNG tank welding robot that was part of the most essential and sophisticated process throughout the LNG cargo shipbuilding process. HHI enabled to acquire the certification from shipowners and classification society, which are necessary for the deployment of the robot in the factories.

Mar.2012 - Aug.2015

Feb 2022 – current

Mar 2021 – Feb 2022

Aug 2018 – Mar 2021

Aug 2018 - July 2019

Sep 2015 – Feb 2018

## PUBLICATIONS

Minyoung Lee, **Jungseok Cho**, Kyung-Soo KimSoohyun 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* 

#### AWARDS & SCHOLARSHIP

- · National Student Scholarship for Master's Program at KAIST
- · Hanjin Group Scholarship
- · Second place in Campus Start-ups Competitions
- $\cdot$  Academic Excellence Scholarship, Top 3% of the Department

#### VOLUNTEER

· Samsung Dream Class Supporting low-income students in the middle school to provide math lectures Spring 2014 – Fall 2015

Spring 2016 – Fall 2017

Fall 2012 & Spring 2013

Fall 2015

Fall 2014

#### TECHNICAL STRENGTHS

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