Jaesung Han

EDUCATION

Kyungpook National University (Daegu, Korea)

Bachelor Student, School of Computer Science and Engineering

The University of Suwon (Hwaseong, Korea)

Department of Information and Communication Engineering

Publications (Domestic)

Jaesung Han, Minwook Kim, Yongjin An, Jinho Han, Jaesoo Kim, Minhee Kim, "SeeHealth: YOLO transfer learning-based self-examination kit result confirmation IoT device for visually impaired", JDCS, Jun. 2023

Projects

AInterview | React, Vite, Spring, Transformer AI model, OpenAI API

Sep. 2023 - current

- AInterview is an website where AI Provides Anticipated Interview Questions and Answers.
- Responsible for Front-end, I am using React and Figma to create the website.

Eyeboard | Linux, Intel OpenVINO, Open-model-zoo, C++, OpenCV

Oct. 2023

- Eyeboard is a program that could help you to type keyboard using your eyes.
- Developed by myself as a personal project, applied gaze-estimation model supported by Intel open-model-zoo.

Human Following Robots | Jetson Orin Nano, Zed camera, Python, YOLO-v8, Vscode

Jul. 2023 – Aug. 2023

- Human-following robots can be applied in various industries such as librarian robots, logistics robots.
- Trained a lightweight detection model using YOLO v8 nano and implemented detection and tracking algorithms.
- Utilized ROS for robot control.

SeeHealth | Raspberry Pi, 3D Printing, Google Cloud API, Python, Git, Bash Shell, YOLO-v8 Mar. 2023 – Jun. 2023

- SeeHealth is an IoT device that provides voice guidance on self-examination kit results for visually impaired.
- Carried out the project as a team leader in the Capstone Design class at Kyungpook National University.
- Was responsible for data augmentation, object detection model training, developed a full scenario for the service.

A SQLite-like console program | Linux, C, Linux System calls, MySQL API

- A console program that operates based on multi-threading and displays query results from a DBMS server.
- We have implemented additional features not provided by SQLite, such as syntax highlighting, multiple access, etc.

Honors and Awards

Bronze Prize, undergraduate thesis award, Journal of Digital Contents Society(JDCS)

Jul. 2023

Scholarship for Academic Excellence, Kyungpook National University

2020 - 2023

Scholarship for Academic Excellence, The University of Suwon

2018 - 2019

Programming: C/C++, Java, Python, cmake, Bash, GLSL, Keras, LATEX

Tools: Git, Linux/Unix Systems, Vim, VS Code, Eclipse

Experience

Robot IT Convergence, ETRI | Research Intern

Jul. 2023 – Aug. 2023

Served as an assistant to train lightweight object detection models for Human Following robot.

System Programming class, KNU | Teaching assistant

Mar. 2023 – Jun. 2023

Taught students how to write programs at the Linux system call level.

Osan Air Base, Republic of Korea Air Force | Sergeant

May. 2021 – Feb. 2023

Served as a computer specialist in the military, providing technical support and assisting in mission-related tasks.

CERTIFICATIONS

TOEIC | 770 TEPS | 331 OPIC | IM2 Industrial Engineer Information Processing

GPA: 4.23/4.3 Mar. 2018 - Feb. 2020

Mar. 2020 – Present

GPA: 4.3/4.5