# **Sungmoon Jung**

#### **SUMMARY**

I am a student passionate about problem-solving and AI research.

My ultimate goal is to become an Al hardware optimization engineer, applying technology to benefit society.

#### **EDUCATION**

03/2020 - 08/2024

B.S. in Information Technology and Engineering



**Jeonbuk National University** 

• GPA 4.03/4.50 (Major GPA 4.17/4.50)

# **INTERNSHIPS**

10/2021 - 06/2023

Undergraduate Research Intern

Jeonbuk National University

- Research on computer graphics
- Performed image analysis and algorithm optimization projects

#### **WORK EXPERIENCE**

06/2024 - Present

Coding Test Instructor



Inflearn

• Launched the Python Coding Test A to Z Course. (link)

03/2022 - 09/2022

Coding Instructor



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• Instructed students on algorithms and programming languages (C++/Python).

# **AWARDS & HONORS**



#### International Collegiate Programming Contest (ICPC)

- Qualified for ICPC Asia Pacific Championship 2024, Hanoi, Vietnam
- 18th Place, ICPC Asia Jakarta Regional, 2023
- 31st Place, ICPC Asia Seoul Regional, 2023
- 54th Place, ICPC Asia Seoul Regional, 2022
- 51st Place, ICPC Asia Seoul Regional, 2021



#### **AI Competition**

• 2nd Prize, Big Data Innovation Convergence University Al Competition, 2022 (link)

# **TEACHING**

# C Programming Mentoring

**ii** 11/2023

Mentor

- Program for Freshman Computer Science Undergraduates
- Taught Basic Concepts of C Programming (Functions, Arrays, Strings, Pointers)

### **Data Structures and Algorithms Tutoring**

**=** 10/2023 - 12/2023

Tutor

- Program for Computer Science Undergraduates (Sophomores and Juniors)
- Taught Concepts of Data Structures and Algorithms and Problem Solving

# High School Algorithm Camp (by goorm)

**=** 02/2023

**Mentor and Problem Reviewer** 

- · Algorithm Problem-Solving Education for High School Students
- Algorithm Problem Explanation and Review

## Teaching Assistant for an Undergraduate Course

**Teaching Assistant** 

- C++ for Object-Oriented Programming, Course in Department of Information Technology for Sophomores
- Marked midterm and final exams, supervised exams

**=** 03/2022 - 06/2022

# **PROJECTS**

## Defect detection in agricultural product X-ray images

**=** 03/2023 - 06/2023

Phttps://github.com/tjdans6342/Defect\_Detection\_Project

- This project is about transforming X-ray images of agricultural products to make defects more visible.
- This project algorithm was implemented using only OpenCV and NumPy libraries, without using any Al technologies.
- Python / OpenCV / NumPy / Matplotlib / Numba

# Gaussian Elimination Parallelization using CUDA Programming

**#** 12/2022

https://github.com/tjdans6342/CUDA-Programming

- This project is implemented using CUDA programming (parallel processing) to perform Gaussian Elimination.
- In theory, applying CUDA programming (parallel processing) to Gaussian elimination can reduce its complexity from O(n) to O(n).
- C++/Cuda

#### Unix-Based Locker Management System

**=** 12/2022

https://github.com/tjdans6342/Unix-Project

- This project implements a locker system using client-server communication.
- It was implemented using C language and Unix socket communication.
- C / Unix

# IT-related Latest External Activities/Contest Notification App

**=** 11/2022 - 12/2022

Phttps://github.com/tjdans6342/DataBase-Project

- This project provides a collection of the latest IT-related external activities and contests in the form of an app.
- · It was developed by building a database through web crawling and creating the app using Unity.
- · Python / Selenium / SQLite / Unity

## Food and Restaurant Recommendation App

**=** 04/2022 - 06/2022

https://github.com/tjdans6342/Android-Studio-Project

- This project recommends restaurants near Jeonbuk National University to users in the form of an app.
- It was developed by collecting data through web crawling and creating the app using Android Studio.
- Python / Selenium / Java / Android Studio

# **SKILLS**

- Programming Language: C/C++, Python
- Tools: TensorFlow, OpenCV, NumPy, Pandas, Selenium
- Other Skills: Git/GitHub, LaTeX

#### **LANGUAGES**

Korean Native English Intermediate

# **CERTIFICATION**

**Engineer Information Processing** 2023.11.15 | HDRK

**Craftsman Information Processing** 2023.09.20 | HDRK