

# Younwoo Yim

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**Programming Languages:** C++, C, C#, Java, Unity VR and SQL database

**Web Development:** HTML, CSS, JavaScript, along with React, Flask, and Node.js Express frameworks.

## Education

### University of Michigan

*Bachelor of Science – Computer Science*

**Ann Arbor, MI**

*Dec 2023*

**Course Highlights:** Introduction to Computer Organization, Web System, Operating System, Computer Vision, Artificial Intelligence, Autonomous Robotics

### Taylor's University

*Bachelor of Engineering*

**Selangor, Malaysia**

*May 2021*

**Course Highlights:** Introduction to Java, Introduction to C++

## Work Experiences

### SAMSUNG

*Intern, software engineer*

**Suwon, South Korea**

*Jun - Aug 2023*

- Analyzed data using SQL to identify new energy solutions, discovering that about 30% of users operate AC for over 6 hours daily.
- Computed AI analytical models to suggest an innovative feature targeted to reduce energy usage by 10%.

### Hippo tnc

*Intern, software engineer*

**Suwon, South Korea**

*Jun - Sep 2022*

- Collaborated with a three-person team to recreate the K-WISC-V intelligence test using Unity VR to make more interactive less time-consuming tests and shortened the assessment duration from 2 hours (paper-based formatting) to 30 minutes, enhancing interactivity.

### H&M

*Sales Assistance*

**Seoul, South Korea**

*Jun - Aug 2021*

- Strategically repositioned high-demand seasonal products to prominent displays, enhancing visibility and contributing to a 10% increase in sales.

## Projects

### MapReduce Search

*HTML/CSS/JavaScript/React/Flask*

**Ann Arbor, MI**

*Dec 2023*

- Engineered efficient segmented inverted index of the web pages through the development and execution of a series of MapReduce programs, resulting in an improvement in search query accuracy.
- Constructed an Index Server equipped with a REST API application, delivering search results in a structured JSON format to make the Search Server return search results in HTML format.

### Thread Library/memory manager/network file system (OS)

*C++*

**Ann Arbor, MI**

*Dec 2023*

- Implemented interface that the C++ standard thread library and the infrastructure provides to the application consists of CPU, thread, mutex, and cv.
- Developed a pager system complete with system calls enabling applications to create, copy, destroy address space, and allocate space within existing address regions.

### Image Colorization

*Python*

**Ann Arbor, MI**

*Apr 2023*

- Developed a PyTorch-based image colorization model, leveraging a comprehensive dataset for training and evaluating, which achieved an 18.7% increase in the SSIM index for the train set.

## Activities

### KISA - Korean International Student Association

*Media Relations*

**Ann Arbor, MI**

*Aug 2021 – Dec 2023*

- Operated monthly social events and fundraising to establish bonding with students and spread Korean cultures, organizing mentor/mentee sessions to help freshmen.

**Language:** Korean(*native*), English (*TOEFL 101/120*)