


Muil Yang

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EDUCATION

The University of Texas at Dallas

Master of Science in Computer Science

Korea National Open University

Bachelor of Science in Computer Science

Yonsei University - Received a full scholarship for 5 out of 6 semesters.

Bachelor of Science in Civil Engineering

The University of Texas at Arlington - Received a full scholarship.

Exchange Program

Richardson, TX

Aug. 2024 – May 2026 (Expected)

Seoul, Republic of Korea

Mar. 2021 – Aug. 2023

Seoul, Republic of Korea

Mar. 2013 – Feb. 2021

Arlington, TX

Aug. 2019 – May. 2020

EXPERIENCE

Software Engineer

Midas IT (MIDASoft Inc.)

Jan. 2021 – May 2024

Seongnam, Republic of Korea

- Developed *Midas Workspace*, a collaboration tool designed for architectural and civil engineers, featuring a 3D model viewer and file drive.
- Implemented Inverse View Transformation to map from the Camera Coordinate System to the World Coordinate System, enabling features such as attaching documents to specific elements like columns or slabs in a 3D model.
- Utilized Next.js's Lazy Loading to separate non-essential components from the initial render, reducing the bundle size by approximately 10%.
- Introduced Recoil for lightweight state management and efficient handling of class instances, and actively integrated real-time functionality using WebSocket.
- Modernized *Midas Members*, a membership management service, by migrating from a legacy jQuery and ID-based system to a React-based frontend, leading approximately 50% of customers to transition to email-based accounts.

Research Assistant

The University of Texas at Arlington

Sep. 2019 – May 2020

Arlington, TX

- Designed and developed a flood monitoring system comprised of an embedded system and web service to monitor flood-prone areas.
- Reduced the system's power consumption by 40% by transitioning from Arduino Mega to Atmel microcontrollers, carefully selecting hardware that provided the appropriate level of computing power for our project.

Private Mathematics Tutor

Self-employed

Mar. 2017 – Jun. 2019

Seoul, Republic of Korea

- Taught Korean SAT prep courses focused on Mathematics, covering Discrete Mathematics, Statistics, and Calculus.

CERTIFICATIONS

AWS Certified Machine Learning - Specialty

Aug. 2024

AWS Certified Security - Specialty

Jul. 2024

AWS Certified Developer - Associate

Feb. 2024

PROJECTS

AI Veggie Cat (Hackathon Project)

Jul. 2024

- Developed an AI-based automatic food ingredient ordering service using an LLM API service, refined prompts to optimize response quality, and implemented the system with Next.js, Flask, and Naver Cloud.

Nutrition Specs (Personal Project)

Jun. 2024 – Jul. 2024

- Developed a web service for comparing nutritional information across multiple products within the same category using Next.js, Django, Amazon Web Services (AWS), and the OpenAI API.

TECHNICAL SKILLS

Languages: JavaScript/TypeScript, Python, C/C++, Java, HTML/CSS

Frontend: React.js, Next.js, Node.js, Webpack, Babel, Three.js, WebGPU, WebXR, WebSocket

Backend: Node.js, Django, Flask, DB (SQLite, MySQL, MongoDB, Redis), WebSocket

Deployment: Docker, Amazon Web Services (EC2, S3, CloudFront, Lambda, etc.), Microsoft Azure

Tools: Git, GitHub, GitHub Actions, MS Office