Muil Yang

[redacted] | muilyang12@gmail.com
LinkedIn: muil-yang | Website: muilyang12.github.io | GitHub: muilyang12

Education

The University of Texas at Dallas — Richardson, TX
Master of Science in Computer Science — *Aug. 2024 – May 2026 (Expected)*

Korea National Open University — Seoul, Republic of Korea
Bachelor of Science in Computer Science — *Mar. 2021 – Aug. 2023*

Yonsei University - Received a full scholarship for 5 out of 6 semesters. — Seoul, Republic of Korea
Bachelor of Science in Civil Engineering — *Mar. 2013 – Feb. 2021*

The University of Texas at Arlington - Received a full scholarship. — Arlington, TX
Exchange Program — *Aug. 2019 – May. 2020*

Experience

Software Engineer — Jan. 2021 – May 2024
Midas IT (MIDASoft Inc.) — *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 from the Camera Coordinate System to the World Coordinate System, enabling features such as attaching documents to specific elements like beams, columns, and 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 — Sep. 2019 – May 2020
The University of Texas at Arlington — *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 — Mar. 2017 – Jun. 2019
Self-employed — *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