

BEREKET ASSEFA

+8210-2187-9779 bereketsiyum@gmail.com Seoul, South Korea Portfolio

Education (More info)

- **Korea Advanced Institute of Science and Technology (KAIST)**
B.S. Electrical Engineering and Computer Science (Double Major)

Aug 2017 – Feb 2022
Daejeon, South Korea

Summary

Full Stack Software Engineer with 2 years of experience developing secure, cross-platform applications and optimizing system performance. Skilled in building backend services, integrating cloud platforms, and creating intuitive user interfaces using modern frontend frameworks. Experienced in automating workflows and enhancing system reliability. Committed to leveraging emerging technologies to drive innovation and efficiency.

Career (More Details)

- **Emocog Inc. (Website)**
Software Engineer

Aug 2022 – Dec 2024
Seoul, South Korea

- Collaborated with Emocog's German subsidiary, **Cogthera**, to design and implement a scalable microservice-based backend, achieving **ISO 27001** compliance.
 - * Implemented **audit logging** using **PostgreSQL** triggers to enhance security and compliance tracking.
 - * Optimized real-time **speech-to-text** systems using **VOSK**, an open-source speech toolkit, and **gRPC**, reducing memory, CPU usage, and latency by **over 50%**.
 - * Deployed a self-hosted **Sentry** instance for robust error monitoring in the mobile application and implemented an asynchronous **Text-To-Speech** server.
 - * Created a real-time dashboard with **FastAPI** and **WebSockets** to aggregate and visualize data from various microservices.
- Automated laboratory workflows by building a laboratory management system using **Next.js** and **Firestore**, replacing Excel sheets with a fully automated solution.

Projects (More Details)

- **AI-Powered Content Management System (Live Site) (Source Code)**
Next.js Application

2024

- Developed a scalable **Next.js** content platform featuring **Tiptap** for rich-text editing, improving content creation speed and efficiency for users.
- Integrated AI content generation via **Content Gen Server** and self-hosted the platform using **Docker** and **Coolify**.
- Designed an intuitive user interface to enhance the content management experience.

- **Content Gen Server (Description) (Source Code)**
FastAPI Microservice

- Built a robust **FastAPI** microservice for AI content generation, integrating **OpenAI** and **Flux**.
- Implemented **role-based access control**, used **PostgreSQL**, **MinIO**, and **Redis** for efficient content management.
- Deployed via **Docker Compose** and **Coolify**, ensuring seamless and efficient hosting.

Certifications (More Certifications)

- **PostgreSQL for Everybody Specialization**
University Of Michigan

2024

Technical Skills

- **Languages:** Python, Javascript/TypeScript, C/C++.
- **Backend:** FastAPI, PostgreSQL, NodeJS, REST APIs, gRPC, Firestore, Redis.
- **Frontend:** React, React Native, Next.js, Tailwind CSS, HTML/CSS.
- **DevOps & Cloud:** Docker, Docker Compose, Kubernetes, AWS, Google Cloud.
- **Tools:** Linux, Git, VSCode.