Ruby Kim

Cloud Engineer

dev.rubykim@gmail.com
Seoul, South Korea
https://dev-rubykim.vercel.app/

Technical Skills

Languages
Python3, C, C++, C#, HTML, CSS, JavaScript

Cloud & Infrastructure
Docker, Kubernetes, AWS, GCP, Azure, NCP, Terraform

Databases
MySQL, MongoDB, Redis, AWS DynamoDB

Frontend Libraries / Frameworks
React.js, Next.js, Vue.js

Backend Libraries / Frameworks
Flask, Django, FastAPI, Express.js

Profiles

LinkedIn
Ruby Kim

Github
ruby-kim

Education

Sejong University
Bachelor of Software • 3.5 / 4.5
Mar 2017 - Feb 2022

Certifications

Professional Cloud Architect Certification
May 2025
Google
Credential ID:
4b0c2a11b47041cfbc0f0bea5f33a29b

AWS Certified Cloud Practitioner
Sep 2024
Amazon Web Services (AWS)
Credential ID:
e0f4ecdb69f64249a2dac97ab5daf721

Languages

Korean
Native

English
Full Professional Proficiency

Summary

Cloud Engineer II specializing in FDA-compliant Serverless architectures. Proven expertise in Zero-Trust mTLS security and global network optimization for clinical telemetry. Skilled in automating large-scale infrastructure via Terraform and AWS SAM to support global clinical trials.

Work Experience

Sibel Health — Chicago, USA (remote in Seoul, South Korea)
Cloud Engineer II — Aug 2021 - Present

- Global Clinical Data Infrastructure (Discovery Hub)
  - Serverless Migration: Re-architected legacy backends to AWS Lambda & SQS, achieving cost-efficiency and 100% data integrity for sensor telemetry.
  - Compliance & Governance: Led multi-region deployments via CloudFormation to meet global data sovereignty and HIPAA/FDA requirements.
  - System Scalability: Modularized core logic into shared Lambda Layers, significantly improving code reusability across the serverless ecosystem.
- FDA-Cleared Vital Telemetry Platform (Anne Hub)
  - Zero-Trust Security: Hardened MQTT infrastructure using HiveMQ with mTLS and server-side TLS rotation for clinical-grade security.
  - Network Optimization: Reduced E2E latency by deploying AWS Global Accelerator, optimizing global ingress paths for medical gateways.
  - Concurrency Engineering: Resolved gateway bottlenecks by architecting an asynchronous backpressure mechanism using Python `asyncio`.
- Engineering Automation & Tooling
  - Deterministic DevOps: Developed a Docker-based Lambda Layer Manager ensuring absolute binary compatibility for C-extension libraries.
  - Infrastructure Automation: Authored a Python CLI to automate environment setup via QR-code-based metadata extraction (Cognito/S3).

Solugate — Seoul, South Korea
Research Assistant — Mar 2020 - Jun 2020
Developed a custom spelling correction model for Voice Of Customer (VOC) data and implemented an STT (Speech-To-Text) accuracy enhancement program.

Technical Projects

Technical Leadership & Infrastructure Demos — Feb 2025 – Present
Lead Architect

- Zero-Cost Ecosystem Design: Designed and deployed a production-ready full-stack environment utilizing AWS Lambda, Vercel, and Turso (Edge SQLite), achieving high availability with zero recurring operational costs.
- Comparative Framework Architecting: Developed side-by-side performance demos for FastAPI (Async) and Flask (WSGI) to evaluate architectural trade-offs in serverless environments.
- Real-time Data Sync: Implemented a WebSocket-based stock simulation on FastAPI to demonstrate low-latency, state-synchronized data streaming on stateless cloud platforms.

PressCheck: Deep Learning-Based News Intelligence — Sep 2020 – Nov 2020
Technical Lead

- Hybrid NLP Pipeline: Architected a system integrating KoBERT and FastText to deliver automated semantic similarity and extractive summarization.
- Automated Data Ingestion: Engineered a resilient BeautifulSoup4 scraper processing news hourly to maintain a 24/7 real-time analytics database.
- End-to-End Integration: Managed full-stack deployment of ML models into a React/Express dashboard, ensuring seamless data flow from scraper to UI.