Seyoung Oh

github.com/driffe | linkedin.com/in/syoh2k/ | syoh2k@gmail.com | 408-304-8254 | San Jose, CA

WORK EXPERIENCES

Software Engineering Intern | KQED

San Francisco, CA   Jul 2025 - Present

- Achieved 27% API reduction by auditing 100+ endpoints across microservices using Postman, deprecating unused APIs based on frontend usage analysis, simplifying API documentation, and reducing maintenance overhead.
- Optimized file upload bottleneck by migrating to reactive architecture (Spring WebFlux), which eliminated blocking errors under concurrent load and achieved 25x throughput increase (2 → 50+ req/sec).
- Identified IntelliJ build configuration issue, authored solution documents for the stakeholders, enabling engineers to use IntelliJ and reducing build times by 55%.

Application Engineer | JKI INC

Campbell, CA   Sep 2024 - Jan 2025

- Built an automated hardware validation framework in C++ that tested device operations (reset, power cycling, EPR) across voltage ranges, enabling engineers to identify reliable operating parameters with single-input execution.
- Identified an additional 17% VCC power margin through systematic performance validation, enabling broader operational stability and extending device lifespan under varying power conditions.

Application Engineer Intern | JKI INC

Yongin-si, South Korea   Jul 2022 - Sep 2022

- Built an interactive temperature monitoring dashboard using Plotly Python and Figma to visualize and analyze post-testing log data, enabling thermal anomaly detection and improving debugging efficiency by 85%.
- Developed an automated data pipeline with NumPy and Pandas, cleaning and processing 10K+ burn-in test logs for the hardware team's thermal analysis workflow.

PROJECTS & ACTIVITIES

IBM SkillsBuild AI lab | Team Lead   Sep 2025 - Dec 2025

- Led a 3-person team developing NBA Hub, an AI-powered fan and NBA information platform using Python FastAPI.
- Won 1st place for AI in Sports Project among 300+ teams using IBM Watsonx Granite models, earning 5 IBM certifications (Critical Thinking, Prompt Engineering, Generative AI, AI Agents, Code Generation and Optimization).

Coffeebyme, coffeebyme.com | Co-founder   Jul 2025 - Present

- Built a RAG-based coffee platform with Spring Boot and Batch, helping users discover Korean specialty coffee.
- Architected cost-optimized infrastructure on AWS (EC2, RDS, Bedrock) supporting 50+ concurrent users on a $30/month budget through strategic use of Docker, Nginx reverse proxy, Cloudflare, and environment separation.
- Built a complete CI/CD pipeline using GitHub Actions, reducing deployment time by 83% (30min → 5min).

MediTrek | Team Lead   Mar 2025 - Apr 2025

- Developed MediTrek, an AI medication recommendation platform serving 100K+ pharmacies with 80% accuracy.
- Won 1st Place for Use of Perplexity/Sonar at HackHayward and placed Top 10 at SpartUp x SVSBDC Pitch Jam.
- Reduced LLM API usage by 30% and improved response times to under 1s with a caching system implementation.

SKILLS

Languages: Java, C/C++, Python, JavaScript, TypeScript, SQL, Dart, HTML/CSS, TailwindCSS
Frameworks/Libraries: Spring Boot, Spring Batch, FastAPI, Next.js, ReactJS, Flutter
Databases/Tools: MySQL, MongoDB, Firebase, Git, Postman, Jira, Confluence, Figma, GA4
Deployments: Docker, GitHub Action(CI/CD), GCP, AWS(IAM, S3, EC2, Bedrock, RDS, VPC), Cloudfare, Vercel, Netlify

EDUCATION

San Jose State University   San Jose, CA

B.S. Software Engineering   Aug 2021 - Dec 2025