Shenqian Wen

(206)-423-5882 | Seattle, WA | shqiwen@gmail.com | github.com/ShqiW | Linkedin | shqiw.coredumped.tech

EDUCATION

Northeastern University　　　　　　　　　　　　　　　　　　　　　　　　　　Seattle, WA
Master Degree, Computer Science　　　　　　　　　　　　　　　　　　　　*2023.08 - 2026.05*

TECHNICAL SKILLS

Programming Languages: C/C++, Python, Go, JavaScript/TypeScript, Java, R, MATLAB
Web & Frameworks: React, Express, Node.js, Nest.JS, TensorFlow, PyTorch, Scikit-Learn
Databases & Tools: MySQL, MongoDB, Redis, Git, GitHub, Shell, Bash, Vim
DevOps & Cloud: Docker, Kubernetes, AWS, Nginx, CI/CD, Jenkins

EXPERIENCE

International Children Art Foundation | *Software Engineer Intern*　　　　　2025.05 – 2025.08
- Developed and maintained full-stack web application using **React**, **TypeScript**, and **Vite** for frontend, implementing responsive UI components based on **Figma** designs with **Tailwind CSS** and **ShadCN** library
- Built serverless backend architecture on **AWS** utilizing **API Gateway**, **Lambda functions**, and **DynamoDB** for scalable data storage and retrieval, handling user authentication through **Cognito**
- Implemented RESTful APIs using **Route 53** for DNS management and integrated **CloudFront** CDN with **S3** for optimized static asset delivery and improved global content distribution

Qualcomm & Microsoft On-Device AI Builders Hackathon　　　　　　　　　　　2025.04
- Developed an ADHD-Friendly PDF Reader using **Python**, **React.js**, and **AnythingLLM** on SnapDragon devices, implementing syllable bolding, highlighting, and visual data framing to enhance readability for users with ADHD

PROJECTS

Microservices-Based E-Commerce Web Application | *TypeScript, Full-stack, Cloud*
- Built scalable StubHub-like ticketing platform using microservices architecture with JWT authentication (15-min tokens) and event-driven caching for secure user access control
- Developed SSR React app with **Next.js**, backend services with **Node.js**/**Express**, and data management using **MongoDB/Redis**
- Deployed cloud-native pipeline with Docker, **Kubernetes**, and **Skaffold** for automated **CI/CD**
- Achieved concurrent users via **JMeter** load testing with 95th percentile response < 200ms and 99.9% success rate

Custom CI/CD System Development | *Java, RabbitMQ, Docker, Git, JUnit, Mockito, RESTful APIs*
- Architected multi-module **CI/CD** system with **Spring Boot** backend and worker nodes executing parallel jobs in **Docker/Kubernetes** containers
- Built CLI tool with YAML-based pipeline configuration for multi-stage builds and job dependencies; integrated reporting system tracking execution status across all pipeline levels
- Implemented message queue architecture using **RabbitMQ** for backend-worker communication with **PostgreSQL** for pipeline state management

Cloud-Native Distributed Ski Resort Data Management System | *Java, AWS, JMeter*
- Developed distributed ski lift data system on **EC2** with **AWS Auto Scaling** handling 10K concurrent requests, achieving 10K/5K req/sec throughput (POST/GET) with 25-40ms/5-10ms latency
- Implemented asynchronous write path with **AWS SQS** for frontend/backend decoupling, achieving 99.9% message delivery through batched processing, dead letter queues, and at-least-once semantics
- Implemented read optimization with **ElastiCache Redis** caching frequently accessed data from **DynamoDB**, utilizing TTL strategies and lazy loading to maintain 85% cache hit rate, reducing DynamoDB read units consumption by 70% and improving response time to sub-10ms
- Conducted **load testing** with **JMeter** validating throughput, latency, and failure rates under peak conditions