Kenny Chen

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EDUCATION

University of California, Irvine **December 2025**
Master of Software Engineering – GPA 4.00

University of California, Riverside **June 2023**
Bachelor of Computer Science (Cum Laude) – GPA 3.74

SKILLS

Programming Languages: Python, Java, JavaScript, TypeScript, C++, C#, SQL

Cloud and Infrastructure: AWS (CDK, ECS Fargate, Lambda, CloudWatch, S3, DynamoDB, API Gateway, Cognito, Amplify), Docker, Terraform, CI/CD

Tools and Frameworks: React.js, Next.js, Vue.js, Node.js, Android SDK, LangChain, Gradio, JUnit, Webpack, Unity, Visual Studio

EXPERIENCE

Amazon Web Services *Seattle, WA* **June 2025 – September 2025**
Software Development Engineer Intern

- Designed a new benchmarking system for the ELB Runtime Service by containerizing the existing framework with AWS CDK, ECS Fargate, and Lambda, enabling test configuration through JSON files.
- Reduced benchmarking processing time by 92%, decreasing the duration from 20 days to less than 2 days by supporting parallel execution of instance type and traffic profile combinations.
- Developed 2 CloudWatch dashboards to improve system monitoring, visualizing 30+ metrics that provide engineers with test metadata, ELB performance metrics, and dependency health for faster troubleshooting.
- Automated manual performance analysis workflow by integrating Python notebooks, Lambda, and S3, generating scaling thresholds, LCU calculations, and visualization reports that reduced the time needed to create and update scaling policies.

c:geo – Open Source Geocaching App *Remote* **May 2025 – June 2025**
Contributor

- Contributed 5 pull requests to an open source Android project, delivering new features, bug fixes, and test coverage improvements while collaborating with maintainers through code review and issue tracking.
- Developed a dynamic compass feature for the cache detail screen using Java and Android UI components, calculating direction from GPS coordinates to replace a static icon with a rotating compass and providing a user setting to toggle direction display.

University of California, Riverside – Bit Securer Lab *Riverside, CA* **April 2023 – June 2024**
Research Intern

- Developed a new force directed graph visualization feature using JavaScript into an online disassembler, enabling analysis of call graphs with support for 1,000+ nodes and edges.
- Streamlined the binary analysis pipeline by refactoring a shell script into a Python based execution system and implemented API in TypeScript for file submissions, enabling automated decompilation through Ghidra's headless analyzer.
- Integrated the API with a Vue.js front end, enabling interactive graph visualization by dynamically fetching and displaying decompiled call graphs, providing researchers with an intuitive interface for analyzing relationships between functions.

PROJECT EXPERIENCE

Multi-Agent AI Coder **December 2025**

- Built a multi-agent software generation pipeline in Python using LangChain that converts natural language into runnable applications by coordinating 4 specialized agents through an MCP based orchestrator that can process 500k+ tokens per run.
- Implemented an API request rate limiter and usage tracking subsystem that prevent quota exhaustion across multiple LLM providers by distributing load across agent groups, reducing model failure rates during long generation chains.
- Improved developer visibility and debugging efficiency by developing an interactive Gradio UI that exposes each agent step, displays structured outputs, and logs token usage and execution time.

Data Lake GUI **September 2025 – December 2025**

- Designed and implemented an AWS hosted React GUI in TypeScript connected to backend services through API Gateway and Lambda, enabling engineers to retrieve and update configuration files stored in S3 and DynamoDB through secure web interactions that replaced manual JSON editing.
- Implemented SSO authentication using AWS Cognito with OAuth 2.0 and SAML assertion integration to UCI Shibboleth, providing secure institutional login and access control for users.
- Deployed the application with AWS Amplify, leveraging automated CI/CD pipelines and serverless hosting to minimize maintenance overhead and ensure consistent alignment with existing Terraform managed infrastructure.