Kyle Ton

San Diego, CA | tonkyle06@gmail.com | www.kylehton.com | linkedin.com/in/kylehton | github.com/kylehton

EDUCATION

University of California, San Diego — Expected Jun. 2027
B.S. in Computer Science and Mathematics — *La Jolla, CA*
- **Relevant Coursework:** Data Structures & Algorithms, Computer Architecture and Assembly, Linear Algebra and Differential Equations, Data Science in Practice, Numerical Optimization of Linear Systems, Graph Theory

EXPERIENCE

Software Engineering Intern - Full-Stack — Jun. 2025 – Aug. 2025
ForOurLastNames — *Remote, US*
- Led end-to-end production deployment of a **containerized Node.js application** by designing AWS infrastructure (Lambda, S3, CloudFront, API Gateway), enabling stateless horizontal scaling and **sub-200ms** API latency under internal load testing
- Implemented a **production-grade authentication and billing pipeline** using Supabase Auth and Stripe, enforcing Row-Level Security policies and verified webhook handling to manage user-scoped access across 50 test accounts and ensure idempotent subscription states under repeated webhook deliveries
- Designed and deployed **observability dashboards** using Prometheus, Grafana, and CloudWatch metrics to track Lambda invocations, cold starts, and memory utilization, enabling data-driven capacity planning and infrastructure tuning

Software Engineering Intern - Full-Stack + AI — Oct. 2024 – Dec. 2024
PM Accelerator — *Remote, US*
- Contributed to backend development of a **FastAPI-based internal tool** integrating an NLP model, evaluating resume keyword coverage across 100 test documents and validating a **15%** increase in matching keywords
- Architected an **asynchronous task processing system** using Celery and Redis, parallelizing NLP workloads and reducing end-to-end processing latency by **50%** (20s → 10s) during internal evaluation
- Designed MongoDB schemas keyed by Google OAuth identifiers, enforcing per-user data isolation and secure access patterns for 100 internal users

Software Engineering Intern — Aug. 2024 – Oct. 2024
Trace — *Garden Grove, CA*
- Automated firmware version tracking and remote diagnostics across **1,000+** camera devices using Python and SSH (Paramiko), standardizing deployment visibility and version traceability
- Developed **automated remote hardware test routines** (power cycling, fan control, component checks), reducing troubleshooting time per device from 2.5 to 1.5 hours and saving around 10 hours per week
- Implemented **automated logging pipelines** feeding shared dashboards, eliminating manual QA data entry and improving visibility during bi-weekly hardware audits

PROJECTS

Git-Lint | *Python, FastAPI, Pinecone, AWS Lambda/S3, Docker, OpenAI Agents*
- Built an event-driven code review service with FastAPI and OpenAI Agents SDK, triggered by pull request webhooks to automatically analyze code changes and generate structured feedback
- Implemented an **embedding retrieval pipeline** using Pinecone and AWS S3 over **200+** embedded code segments, enabling repository-scoped contextual analysis without full repo loading
- Containerized and deployed the service using Docker and AWS Lambda, enabling serverless function execution and sleep/cold-starts

StockSense | *React, Java, Spring Boot, PostgreSQL, AWS S3, Docker, Redis*
- Built a real-time stock news market platform combining React-based UI with a **Spring Boot** backend, delivering live prices and sentiment-tagged news stored in AWS S3, with CI/CD implemented via GitHub Actions.
- Enabled data-driven investment insights by web-scraping stock news with yfinance API and analyzing media sentiment with **HuggingFace's FinBERT** model, providing numerical evaluation per-article

TECHNICAL SKILLS

Languages: Python, Java, C++, TypeScript, JavaScript, SQL, HTML/CSS (Tailwind)
Frontend & Backend: React.js, Next.js, Spring Boot, FastAPI, Node.js, Express, PostgreSQL REST API
Cloud & DevOps: AWS (API Gateway, Lambda, S3, CloudFront), Docker, GitHub Actions (CI/CD), Redis
Machine Learning/AI: Scikit-learn, XGBoost, RAG Pipelines, Vector Databases (Pinecone)