


Samuel Lucas

Expert in cloud-based systems and software product development

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Skills

Languages	Python, TypeScript, JavaScript, C++, C, HTML, CSS, SCSS, Kotlin, SQL, Java, Bash
Tools	Docker, Figma, Postman, Storybooks, Cypress, Make, AWS CDK, Terraform, Kubernetes
Technologies	REST APIs, UI/UX, CI/CD pipelines, SoM/SoC/FPGA, AI/ML, gRPC, MQTT, NoSQL, cryptography
Infrastructure	AWS (including GovCloud), GCP, Microservices, Serverless, Android, iOS, Linux, Windows

Work Experience

Chief Technology Officer

CypherMed Cloud (Mar 2024 – Present)

- Worked with the CEO of Promenade Software to establish a new subsidiary company focused on our software product
- Rebuilt what was originally an internal tool into a fully formed client-facing product, with a dashboard & SDKs
- Coordinate business objectives with the CEO, and translate them into technological objectives for the team
- Manage highly scalable, tightly controlled, and autonomously deployed microservice infrastructure built on AWS

Lead Engineer & Product Owner for CypherMed Cloud

Promenade Software (Mar 2022 – Mar 2024)

- Re-designed our cloud platform service from the ground up and lead development efforts across the stack
- Coordinating team of developers and designers, managing the project from a high level, reporting directly to the CEO
- Assisted in design efforts for our client projects, oversee cloud resources and developer operations, mentoring junior devs

Senior Software Engineer

Promenade Software (June 2021 – Mar 2022)

- Worked with clients to design and develop cloud-based, HIPAA-compliant medical software, built on our cloud platform
- Expanded and improved the existing cloud platform; led efforts to redesign it and distribute direct-to-consumer

Senior Software Engineer

Loko AI (Sep 2020 – June 2021)

- Head of design, implementation, and deployment efforts for almost all cloud-based ML software and device firmware
- Projects include a machine learning platform for real-time, rules-based anomaly detection on live video streams; a highly secure and ultra-low latency streaming engine; and an autonomous temperature detector for COVID-19 prevention
- Development of highly secure, FIPS and NIST compliant software for the military and other high-risk environments

Software & Control Systems Engineer

Bridge 12 Technologies (Aug 2017 – June 2020)

- Chiefly responsible for the control systems of assorted radiation technologies in the terahertz products division
- Designing from the ground up: writing firmware, embedded software, creating APIs, GUIs, client/server apps
- Projects include particle accelerators, gyrotrons, vacuum bakeout systems, and lab instrumentation

Education

Tufts University

Medford, MA (2018-2020)

M.S. Mechanical Engineering with a focus in Design and Digital Control

The Pennsylvania State University

University Park, PA (2013-2017)

B.S. Physics with a focus in Computational Physics