Alex McNamara

468 McKinley Dr
Marina, CA
93933

510-738-7344
alex.mcnamara@gmail.com / github: amcnamara

BACKGROUND

Demonstrated executive leadership, with a broad set of professional accomplishments:

- Led engineering organization through substantial restructuring.
- 60+% reduction in opex, improving runway and incremental SaaS margins.
- Achieved a successful exit via competitive aquisition process.

Strong written and verbal communication skills:

- Published board and marketing collateral, focusing on technical accuracy and clarity.
- Ran regular all-hands to coordinate strategy across engineering, product, and sales.
- Continuously communicated with strategic customers to address their needs directly.

Strategic planning informed by deep techical expertise:

- 10+ years of experience as a lead engineer, with products serving millions of users.
- 6+ years with applied ML/AI (CV, sensor fusion, anomaly detection, NLU, classifiers)
- Extensive knowlege of cloud infrastructure and application optimization.

MAJOR PROJECTS

- Chief software architect on an industry-first AI-powered PTT communication platform.
- Early-stage principal engineer at a sales-automation startup, now valued at 4.4B$.
- Lead engineer on Amazon for Windows desktop-integrated retail application (Windows 8).
- Designed identity and access management systems for the Amazon Go grocery store.
- Founded a startup to create a Git-integrated project management SaaS suite.
- Created an early smartphone CMS and ad delivery platform, which served 6M users.

AREAS OF EXPERTISE

Full-stack engineering background with extensive production experience in:

- Infrastructure: Terraform, Docker, and Kubernetes; on AWS, GCP, and Azure.
- Cloud services: EC2, S3, SQS/SNS, ECS/EKS, ElastiCache, RDS, Dynamo, CF.
- Databases: Postgres, DynamoDB, and Redis.
- Languages: Python, Javascript, GoLang, Ruby, Java, and Clojure.
- Client frameworks: React, Angular.
- Backend frameworks: Spring, Rails.

RESEARCH AND PATENTS

Lead author on 17 patents granted by the USPTO, relating to research in:

- Sensor fusion.
- Object detection and classification.
- Physical user interation.
- Hybrid-native mobile applications.

WORK EXPERIENCE

Chief Technology Officer   Orion Labs, San Francisco [2019 – 2023]
- Held roles as both CTO and Chief Software Architect, reporting to the CEO and board.
- Oversaw four engineering teams (clients, services, infra, QE), as well as corporate IT.
- Implemented best-practices for security, code maintainability, and deployment.
- Moved core infra to Kubernetes, enabling cloud-portability and on-prem deployment.
- Migrated data layer from ElastiCache to RDS, improving bulk query times by 90+%.
- Regularly collaborated with strategic accounts to ensure their needs were being met.
- Worked with the CEO, sales, and CS to establish short and long-term technical strategy.
- Ran quarterly all-hands, maintaining consistent priorities and focus across the company.
- Pivoted the company away from consumer/SMB hardware, towards enterprise SaaS.
- Pursued top-line growth by scaling the platform to allow orders-of-magnitude more users.
- Restructured the organization to improve operational efficiency, and reduced opex 60+%.
- Built out technical aspects of aquisition deck, pitched alongside the CEO through to DD.

Principal Software Engineer   Outreach, Seattle [2015 – 2017]
- Responsible for overhauling MVP system architecture to improve scalability and security.
- Refactored monolith backend into identity and backward-compatible API micro-services.
- Incorporated OAuth and upstream AD integration to enable SSO and 3P API access.
- Technical advisor on SOC2 certification process, overseen by the Chief Infosec Officer.
- Profiled the Everywhere plugin, improved rendering by 20% with only minor changes.

Software Development Engineer   Amazon, Seattle [2012 – 2015]
- Lead engineer on the Amazon for Windows retail application, launched with Windows 8.
- Designed an SPA framework specifically to manage and coordinate sandboxed web assets.
- Extended Amazon's Cordova-like mobile event bus to support a richer navigation model.
- Created a fully responsive UI, which adhered to the Metro design language spec exactly.
- Ensured that Amazon for Windows was Amazon's first fully-HTTPS retail experience.
- Designed customer identity management and entry/exit workflow for Amazon Go.
- Iterated early prototypes of all screen experiences in Amazon Go for executive leadership.
- Implemented real-time cart inventory tracking experience for the Amazon Go mobile app.
- Technical advisor on Amazon Books inventory management and checkout systems.

Founder, Software Engineer   Dreamux, Montreal [2010 – 2012]
- Built a project management SaaS suite, for small to mid-sized software development firms.
- Wrote and open-sourced Slurm, an experimental SQL ORM built in Clojure.

Further work experience and references available upon request.

EDUCATION

B.A.Sc. Software Engineering, with Honors
University of Ottawa