Alex McNamara

510-738-7344

alex.mcnamara@gmail.com / github: amcnamara

468 McKinley Dr
Marina, CA
93933

BACKGROUND

- Demonstrated executive leadership, with a broad set of professional accomplishments:
    - Led engineering organization through substantial restructuring.
    - 60+% reduction in cloud opex, improving runway and incremental SaaS margins.
    - Achieved a successful exit via competitive aquisition process.
- Strong written and verbal communication skills:
    - Edited various board and marketing collateral for 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 implementing applied ML/AI (CV, sensor fusion, NLU, classification...)
    - Extensive knowlege of cloud infrastructure and application optimization.

MAJOR PROJECTS

- Chief software architect on 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, R53, Lambda, VPC, and IAM.
- Databases: Postgres, DynamoDB, and Reddis.
- 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.

EDUCATION

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

AREAS OF EXPERTISE

- Full-stack software engineer with extensive work experience in:
  - Languages: Java, Javascript, Ruby, and Clojure.
  - Client frameworks: React, Angular.
  - Backend frameworks: Spring, Rails.
  - Databases: MySQL, DynamoDB, and Reddis.
  - Infrastructure: Terraform, Consul, Vagrant, and Kubernetes; on AWS and Azure.
  - Cloud services: S3, SQS/SNS, SWF, Lambda, VPC, and IAM.
- Experienced software architect and tech lead, able to coordinate across multiple teams.
- Demonstrated ability to deliver work independently and laterally across organizations.

WORK EXPERIENCE

Sabbatical   2017 − 2019
Personal, Ottawa
- Spent time with a family member who was undergoing medical treatment.

Principal Software Engineer   2015 − 2017
Outreach, Seattle
- 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 directory integration to enable SSO and 3P API access.
- Technical advisor on SOC2 certification process, overseen by the Chief Infosec Officer.
- Profiled the Everywhere plugin, improving render performance by 20% with minor changes.

Software Development Engineer   2012 − 2015
Amazon, Seattle
- 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.
- Prototyped early iterations 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.

Software Engineer, Founder   2010 − 2012
Dreamux, Montreal
- 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.

Client Manager   2009 − 2009
Web Impact, Toronto
- Managed a small team of developers, coordinating resources for feature/support requests.
- Worked with customers on contract specs, and implemented initial prototypes as needed.
- Oversaw support request triage, and communicated progress with customers.

Lead Software Developer   2007 − 2008
Polar Mobile, Toronto
- Created a mobile-focused advertising and analytics platform, serving over 6M users.
- Normalized data acess layer, reducing query volume and infrastructure costs by 50%.
- Wrote monitoring and deployment shell scripts to improve service uptime.

Software Developer, Contractor   2006 − 2006
Nortel, Belleville
- Embedded a provisioning web server into the experimental SIP firmware of the 1140E phone.
- Analyzed Cisco, Avaya, and Mitel hardware for cost-reduction and competitive analysis.