Matthew L

Senior Software Engineer | Full-Stack Developer | Cloud Architect

[mlong@magneton.io](mailto:mlong@magneton.io) | 312-478-9956 | [LinkedIn](http://www.linkedin.com/in/mlabs1913)

# Executive Summary

Hands-on Senior Software Engineer with 20+ years building mission-critical systems for Fortune 500 companies and high-growth startups. Deep technical expertise in full-stack development, cloud architecture, and AI/ML implementation. Proven ability to collaborate effectively in team environments while also capable of leading teams of teams when needed. Patent holder in secure distributed messaging architecture with a track record of delivering scalable solutions that drive business value.

## Key Achievements

* **$300M Exit** - Core contributor at Evident.io (acquired by Palo Alto Networks)
* **$70K Annual Savings** - Optimized AWS infrastructure reducing operational costs
* **100+ Successful Engagements** - Delivered high-value solutions across Finance, Healthcare, Energy, and Government sectors
* **Patent Holder** - Invented secure distributed messaging architecture
* **DARPA Recognition** - Distinguished technology innovator and leadership alliance member
* **500+ Commits (2024-2025)** - Active development across 68 repositories
* **Zoro E-commerce Platform** - Built microservices handling millions of transactions daily (2025)
* **TSI Infrastructure** - Architected AWS cloud solutions with React/Laravel stack (2024-2025)
* **Pop Secret IVR System** - Developed Twilio-powered voice AI system for national campaign (2025)

# Core Competencies

## Software Engineering Excellence

* **Full-Stack Development:** Expert in React, Node.js, Python, Java/Spring, Go
* **System Architecture:** Designed and built 100+ production systems
* **Code Quality:** Strong advocate for clean code, testing, and best practices
* **Problem Solving:** Complex algorithm design and optimization

## Team Collaboration & Leadership

* Thrives in collaborative team environments as individual contributor
* Strong communicator across technical and non-technical stakeholders
* Mentors junior developers and shares knowledge freely
* When needed, can lead teams of teams (20+ engineers)
* Experience as CTO and Director-level positions when leadership required

## Technical Expertise

### Cloud & Infrastructure

* **Multi-Cloud Expert:** AWS, Azure, GCP certified implementations
* **DevOps Leadership:** Kubernetes, Terraform, CI/CD pipeline optimization
* **Security Focus:** NIST, SOC2, PCI, HIPAA compliance implementation

### Development Stack

* **Languages:** Python, JavaScript/TypeScript, Go, Java/Spring, Scala
* **Frameworks:** React, Node.js, FastAPI, Django, Spring Boot
* **Data & AI:** TensorFlow, PyTorch, Spark, Kafka, BigQuery, Snowflake

# Education & Professional Development

* **M.S. & B.S. Computer Science** - University of Colorado
* **Certifications:** Red Hat Certified, Microsoft Certified Professional
* **Continuous Learning:** Advanced studies in Quantum Computing, AI/ML, Cryptography, and Applied Mathematics

# Recent & Featured Engagements

Zoro/Grainger (2024-2025)

Senior Software Engineer

**Impact:** Built critical e-commerce microservices processing millions of daily transactions

* Developed shipment tracking service with 85 commits handling real-time package updates
* Built return service managing complex partial shipment logic (52 commits)
* Implemented FedEx webhook integration with Datadog monitoring (67 commits)
* Created order management APIs supporting high-volume retail operations
* **Tech Stack:** Node.js, Java/Spring Boot, Python, Google Cloud, Microservices

TSI (2024-2025)

Senior Full-Stack Engineer

**Impact:** Architected cloud infrastructure and full-stack applications

* Designed AWS infrastructure with React/Laravel application stack
* Implemented Kubernetes orchestration for scalable deployments
* Built responsive frontend components with modern React patterns
* Optimized database queries improving response times by 40%
* **Tech Stack:** AWS, React.js, PHP Laravel, Kubernetes, PostgreSQL

Pop Secret/PopCorners (2025)

Senior Software Engineer

**Impact:** Created national marketing campaign's technical infrastructure

* Built Twilio-powered IVR system for "Buttery Secrets Hotline"
* Implemented voice recording, storage, and playback features
* Designed 4-option interactive menu with SMS integration
* Deployed serverless architecture on Vercel with AWS S3 storage
* **Tech Stack:** Node.js, Express, Twilio, AWS S3, PostgreSQL, Vercel

Shell (2022-2023)

Senior Software Engineer

**Impact:** Built enterprise-scale data analytics platform for energy load forecasting

* Designed microservices architecture using AWS EKS/GCP GKE with Kafka backbone
* Implemented ML-powered predictive analytics reducing forecasting errors by 30%
* Collaborated with team of 8 engineers implementing GitOps and ArgoCD

Fidelity Labs (2020-2023)

Senior Software Engineer

**Impact:** Developed SOC2-compliant RegTech platform processing millions of transactions

* Architected multi-cloud infrastructure supporting 99.99% uptime SLA
* Implemented BERT-based AI models improving recommendation accuracy by 45%
* Built ReactJS frontend and Java Spring microservices handling 10K+ requests/second
* Key contributor to saifr.ai platform development

Regis Corporation (2018-2022)

Senior Full-Stack Developer

**Impact:** Built ML-powered document management system increasing client retention by 25%

* Developed ML-powered document classification system using AWS SageMaker
* Created custom Outlook plugin processing 100K+ financial documents monthly
* Built ReactJS portfolio management platform serving 500+ franchisees

Evident.io (2016-2018)

Senior Software Engineer

**Company Exit: $300 Million to Palo Alto Networks**

* Engineered cloud-native security solutions detecting 1M+ security events daily
* Received "Bug Fix of the Year 2017" award for critical performance improvements
* Reduced AWS operational costs by $70,000 annually through optimization

# Industry Impact

## Sectors Served

**Financial Services:** Fidelity, Avant Credit, First Data, Blue Cross Blue Shield

**Energy & Utilities:** Shell, Houston Energy, Sunoco

**Technology:** Apple, Target, Zebra, TSI

**Government:** DARPA, USDA

**Retail & Hospitality:** Pizza Hut, Cabelas, Royal Caribbean

**Healthcare:** Various HIPAA-compliant implementations

## Innovation & Research

* **Patents:** Secure distributed messaging architecture
* **Open Source:** Active contributor to multiple projects
* **R&D:** DARPA resilient cloud architectures using fault-tolerant rough-set grammars
* **Thought Leadership:** Published research in distributed systems and quantum computing

# Technical Architecture Expertise

## Enterprise Solutions

* High-Performance Computing (HPC) implementations
* Microservices and event-driven architectures
* Distributed Service-Oriented Architectures (DSOA)
* Real-time data processing pipelines
* Consensus algorithm design and implementation

## Operational Excellence

* Infrastructure as Code (IaC) automation
* Container orchestration and service mesh
* Performance optimization and capacity planning
* Disaster recovery and business continuity
* Security auditing and penetration testing

# Value Proposition

I bring deep technical expertise and strong collaborative skills to build exceptional software. My approach focuses on:

* **Engineering Excellence** - Writing clean, maintainable, well-tested code
* **Technical Innovation** - Implementing cutting-edge solutions with practical applications
* **Collaborative Development** - Working effectively in agile teams and pair programming
* **System Optimization** - Building performant, scalable architectures
* **Knowledge Sharing** - Mentoring teammates and documenting solutions

# Ready to Build Something Amazing Together?

Let's discuss how my engineering expertise can contribute to your team's success and help deliver exceptional software solutions.

**Connect:** [mlong@magneton.io](mailto:mlong@magneton.io) | 312-478-9956 | [LinkedIn](http://www.linkedin.com/in/mlabs1913)

*References and detailed project portfolios available upon request*