

JAMAL HAMILTON

Senior Full Stack AI Engineer

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PROFESSIONAL SUMMARY

Senior Full Stack AI Engineer with 12+ years delivering enterprise web, mobile, and cloud solutions across energy, automotive, government, and fintech sectors. Specializes in agentic AI architectures (LangChain, LangGraph, RAG, Claude/GPT-4), cloud-native microservices, and full-stack product delivery from Figma to production. Proven record of reducing deployment cycle times, improving system observability, and embedding AI capabilities that measurably increase team and user productivity. Confidently own architecture decisions across AWS, Azure, and GCP.

TECHNICAL SKILLS

AI / LLM	Claude AI, Azure OpenAI, GPT-4, LangChain, LangGraph, Agentic AI, RAG, AWS Bedrock, Azure Foundry, FastAPI
Front-End	React, Vue 3, Angular, Next.js, Blazor, TypeScript, Tailwind, Bootstrap
Back-End	Node.js, Python (FastAPI, Django, Flask), Go, .NET/C#, Java, PHP, Ruby on Rails
Mobile	React Native, Kotlin, Swift, Android Jetpack, EMV/NFC payment SDKs
Databases	PostgreSQL, MongoDB, SQL Server, MySQL, DynamoDB, Couchbase, Elasticsearch, Redis
Cloud	AWS (Lambda, EC2, S3, SQS, Step Functions, CDK) · Azure (Functions, DevOps, Cosmos DB, Key Vault) · GCP
DevOps / IaC	Docker, Kubernetes, Terraform, GitHub Actions, Jenkins, Argo CD, Airflow
Observability	Grafana, Prometheus, InfluxDB, Grafana Loki, Azure Sentinel
Security	HIPAA, AWS IAM, Azure Key Vault, WAF, CodeQL, Dependabot, OAuth2
Messaging	Kafka, RabbitMQ, AWS EventBridge, Redis Pub/Sub
Testing	Cypress, Selenium, Jest, PyTest, JUnit, xUnit, NUnit
Methodology	Scrum, SAFe, Kanban, TDD, GitOps, MLOps

PROFESSIONAL EXPERIENCE

DTE Energy — Remote

Mar 2025 – Mar 2026

Sr. Full Stack Engineer / AI Architect

- Architected and delivered cloud-native AI applications on Azure and AWS, reducing manual processing time by ~40% through serverless Python/Vue pipelines and automated document ingestion via Amazon SQS + Lambda.
- Built agentic Claude AI pipelines (RAG + vector search) that autonomously retrieve, reason over, and surface operational data — cutting analyst research time by an estimated 30%.
- Designed and secured a RAG platform using AWS IAM and Secrets Manager for LLM API key rotation, achieving zero credential-related incidents post-launch.
- Led Blazor WebAssembly and Vue 3 + TypeScript component library initiatives, standardizing UI patterns across 3+ internal product teams.
- Authored GitHub Actions CI/CD pipelines covering lint, test, build, and deploy stages; reduced average deployment cycle from ~2 hours to under 25 minutes.
- Containerized microservices with Docker/Kubernetes and built Grafana dashboards for production observability, reducing mean time to detect (MTTD) incidents by ~35%.
- Integrated Claude AI for code generation, debugging assistance, and technical documentation — measurably accelerating sprint velocity across the engineering team.

TORC Robotics — Remote

Jan 2025 – Jun 2025

Sr. Full Stack AI Engineer

- Built real-time analytics dashboards in Vue.js + Golang powering live telemetry for autonomous vehicle test fleets; integrated Grafana with Prometheus, InfluxDB, and Elasticsearch.
- Migrated legacy Vue 2 Options API codebase to Vue 3 Composition API, reducing bundle size by ~22% and improving component load performance.
- Created an AI-powered developer documentation assistant using Claude + FastAPI + React that auto-generates API docs from source code, saving ~5 hrs/week per developer.
- Implemented Claude memory-enabled agentic systems backed by vector databases for context-aware autonomous task execution using LangChain Agents.
- Built offline-capable Android modules (Kotlin/Jetpack) supporting vehicle field testing in zero-connectivity environments; managed full APK signing and enterprise deployment pipeline.
- Applied RAG pipelines in production LLM applications using AWS Step Functions for multi-step ETL orchestration, and Couchbase for high-throughput NoSQL storage.
- Established GitHub code review standards and Codespaces-based reproducible workflows, reducing average PR cycle time by 40%.

Clayton Homes — Remote

Aug 2024 – Jan 2025

Senior Full Stack Software Engineer

- Engineered event-driven Node.js microservices using RabbitMQ and AWS EventBridge, supporting high-volume transactional workflows with 99.9% uptime SLA.
- Developed agentic Claude AI chatbots and AI copilots for code generation, data analysis, and business insight extraction — deployed across internal tooling for 200+ users.
- Built Claude-driven multimodal accessibility tools (voice + vision) reducing support ticket volume by ~18% through intelligent self-service.
- Configured GitHub Advanced Security (CodeQL + Dependabot) across 12+ repositories, identifying and remediating 60+ vulnerabilities within the first sprint.
- Developed secure Android POS applications in Kotlin/Java with EMV/NFC payment support; managed APK signing, build flavors, and enterprise retail deployment.
- Rebuilt legacy SOAP/REST services as Azure Functions microservices, improving API response times, and cutting infrastructure costs by ~20%.
- Integrated LangChain with internal APIs to deliver scalable generative AI services consumed by product and analytics teams.

SnowBird Agility (VA Gov Contract) — Remote

Aug 2023 – Sep 2024

Senior Full Stack Developer / Engineer

- Designed and delivered HIPAA-compliant full-stack services for the VA, including FastAPI async Python microservices, React front-end with role-based access control, and Kafka-based data pipelines processing millions of records daily.
- Integrated GPT-4 and Azure AI Services (Language, Vision, Speech) into production applications; built a GPT-4 code generation tool that reduced boilerplate authoring time
- Led Vue 2 → Vue 3 migration effort for the core front-end, improving Lighthouse performance scores 18 points and reducing component re-render cycles.
- Built CLI tools in Golang for automated deployments and test scaffolding, eliminating ~3 hours/week of repetitive DevOps work per engineer.
- Wrote comprehensive xUnit/.NET and Jest/React test suits achieving coverage on critical payment and authorization paths.
- Designed and executed blue/green and canary deployment strategies for API cutovers with zero downtime across 4 production services.

Know Ink — Remote

Jan 2023 – Jan 2024

Senior Full Stack Developer / Engineer

- Built full-stack election technology applications in React and PHP with REST/GraphQL APIs; integrated Stripe and Twilio for payment and SMS workflows.
- Integrated OpenAI GPT-4 Vision API for image-to-text mobile accessibility features, directly expanding usability for visually impaired voters.
- Built containerized Golang services deployed via Kubernetes with horizontal pod autoscaling, supporting traffic spikes during election day with no degradation.
- Implemented Grafana monitoring dashboards with alerting rules, reducing incident detection time from hours to under 10 minutes.
- Delivered hybrid React Native apps with GPS, camera, biometrics, and push notifications for field poll workers.

Construction Bevy — Remote

Sep 2019 – Jan 2023

Full Stack Developer / Engineer

- Developed real-time event-driven architecture in Golang + Kafka for insurance claim processing; built Go-based ML classification models on claim documents.
- Built GCP CI/CD pipelines for PHP/Spring Boot services and designed custom Terraform modules for Azure SQL and App Service, standardizing IaC across 5 projects.
- Implemented NFC-based tap-to-pay and EMV Level 2 transaction processing (AID selection, CAPK management, online/offline authorization) for Android POS systems.
- Maintained and upgraded React Native apps with OAuth2 authentication; implemented blue/green deployments with automated rollback triggers.

Aventiv Technologies — Atlanta, GA (Hybrid) Software Developer II

Jun 2015 – Jan 2019

- Developed Angular and Vue enterprise apps in Agile/SAFe environment; migrated legacy SOAP/REST services to Spring Boot microservices, reducing average API latency by 30%.
- Built CI/CD pipelines with GitHub Actions and Jenkins for .NET and PHP applications managed through Azure DevOps and Kubernetes.
- Migrated business reporting tooling to Blazor + Power BI + SQL Server, eliminating manual Excel reporting for 50+ stakeholders.
- Conducted peer mentoring on TDD, GitOps, and API versioning best practices; ran knowledge-sharing sessions that became standard onboarding curriculum.

Surfside Web — Surfside Beach, SC (Onsite) Software Developer

Aug 2012 – May 2015

- Built SPAs in AngularJS, redesigned e-commerce checkout flows increasing conversion rate by ~12% and implemented full-text search with indexed MySQL queries.
- Developed MySQL-backed CMS for blog and inventory management; created modular JS components that reduced bug surface area across 8+ client sites.

EDUCATION

Bottega University

Full Stack Development Certification

2012

Loris High School

1999