

# JAMAL HAMILTON

Senior Full Stack AI Engineer

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## PROFESSIONAL SUMMARY

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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 design to production. Proven record of reducing deployment cycle times, improving system observability, and embedding AI capabilities that measurably increase team and user productivity. Owns architecture decisions across AWS, Azure, and GCP.

## TECHNICAL SKILLS

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**AI / LLM:** Claude AI, Azure OpenAI, GPT-4, LangChain, LangGraph, Agentic AI, RAG, AWS Bedrock, Azure AI Foundry, Azure DataBricks, 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 (Cloud Run, Cloud Functions, Pub/Sub, GKE)

**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, SAgile, Kanban, TDD, GitOps, MLOps

## PROFESSIONAL EXPERIENCE

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**AFS Logistics** — Remote

Jan 2026 – Aug 2026

**Sr. Full Stack Engineer**

- Developed and enhanced enterprise logistics applications using Python backend services and Vue.js front-end components to support transportation management and supply chain operations
- Built responsive, user-friendly web interfaces with Vue.js, improving usability and workflow efficiency for internal teams and logistics users
- Designed and maintained Python-based REST APIs to support data exchange between applications, services, and third-party systems
- Implemented backend business logic, data validation, and integrations to support freight management, reporting, and operational processes
- Collaborated with cross-functional teams to analyze business requirements and deliver scalable software solutions aligned with logistics workflows
- Improved application performance and reliability through code optimization, debugging, and enhancements across front-end and backend services

- Participated in Agile development practices, including sprint planning, code reviews, testing, and production support

**DTE Energy** — Remote

*Feb 2025 – Feb 2026*

**Sr. Full Stack Engineer / AI Architect (Contract)**

- Architected and delivered cloud-native AI applications on Azure and GCP, reducing manual processing time by approximately 40% through serverless Azure Functions, Cloud Run, and Cloud Functions Python services
- Built Vue.js front-end applications and automated document ingestion pipelines using Azure Event Hubs, Pub/Sub, and Cloud Storage
- Built agentic Claude AI pipelines (RAG + vector search) on Azure Cognitive 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 Azure Databricks, Azure Key Vault, Azure AD, and AWS IAM/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 Azure DevOps, Cloud Build, and GitHub Actions CI/CD pipelines for automated linting, testing, building, and deployment to Cloud Run and GKE
- Designed multi-agent AI orchestration frameworks using LangChain and LangGraph to coordinate specialized agents for complex, multi-step enterprise workflows
- Containerized microservices with Docker/Kubernetes and built Grafana dashboards for production observability
- Improved monitoring coverage by integrating Grafana with enterprise monitoring tools and cloud platforms
- Integrated Claude AI for code generation, debugging assistance, and technical documentation — measurably accelerating sprint velocity across the engineering team
- Developed and maintained scalable full-stack web applications using Python, React.js, and RESTful APIs to support business-critical operations
- Designed and implemented microservices in Python to improve system scalability, performance, and maintainability
- Implemented JWT/OAuth authentication and role-based access controls, backed by Cosmos DB, to secure web applications

**TORC Robotics** — Remote

*Jan 2025 – Jun 2025*

**Sr. Full Stack AI Engineer (Contract)**

- Built real-time analytics dashboards in Vue.js + Golang powering live telemetry for autonomous vehicle test fleets
- Monitored Windows and Linux servers using Grafana dashboards to ensure system availability and performance
- 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 Google Cloud Workflows for multi-step ETL orchestration, and Cloud Firestore for high-throughput NoSQL storage
- Established GitHub code review standards and Codespaces-based reproducible workflows, reducing average PR cycle time

**Clayton Homes** — Remote

*Aug 2024 – Jan 2025*

**Senior Full Stack Software Engineer (Contract)**

- Engineered event-driven Node.js microservices using RabbitMQ and AWS EventBridge, supporting high-volume transactional workflows

- 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 tickets
- Integrated React front-end applications with Node.js backend services through REST and JSON-based APIs
- Configured GitHub Advanced Security (CodeQL + Dependabot) across repositories, identifying and remediating 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** — Remote

*Aug 2023 – Sep 2024*

**Senior Full Stack Developer / Engineer (Gov Contract)**

- 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
- Architected and deployed production-grade LLM solutions leveraging OpenAI models (GPT-4/GPT-4o) integrated with Azure AI Search to deliver enterprise-scale RAG pipelines, reducing information retrieval 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 high 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 (Contract)**

- 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 (Contract)**

- 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 Azure 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)

*Jun 2015 – Jan 2019*

**Software Developer II**

- 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)

*Aug 2012 – May 2015*

**Software Developer (Contract)**

- 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**

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Full Stack Development Certification — Bottega University, 2012

Loris High School, 1999