

Keith Steward, Ph.D.

Agentic AI Engineer | AWS Generative AI Solutions Architect

Boston, MA | 508-318-8035 | keith.steward@gmail.com | LinkedIn | IntelligentDataWorks.ai

PROFILE

Hands-on agentic AI and cloud software engineer who turns LLM workflows, prototypes, and complex business requirements into production systems. Architected and helped build AssistX, a GenAI platform delivering 70+ automations across more than 20 workflows with AI agents, RAG, LangGraph, Python, FastAPI, PostgreSQL/PGVector, and AWS. Brings deep AWS AI/ML and SageMaker experience from advising 200+ enterprise customers. Combines architecture, coding, testing, integration, deployment, evaluation, and regulated-system judgment to scale reusable AI capabilities.

SELECTED AGENTIC AI ENGINEERING EVIDENCE

- **Production agentic delivery:** built AssistX around LLMs, AI agents, multi-agent patterns, RAG, semantic retrieval, and deterministic workflow orchestration.
- **AWS AI/ML:** applies AWS services including Bedrock AgentCore and SageMaker, backed by four years in AWS specialist roles and 200+ enterprise customer engagements.
- **Full-stack implementation:** works hands-on with Python, FastAPI, PostgreSQL, PGVector, LangChain, LangGraph, APIs, AWS cloud infrastructure, and CI/CD.
- **Prototype-to-production execution:** released AssistX within eight months and repeatedly delivered cloud, data, AI, and regulated software from architecture through operation.
- **Regulated-system perspective:** delivered privacy and AI-governance systems at MassMutual and earlier HIPAA-regulated, FDA-cleared dental-health technology.

PROFESSIONAL EXPERIENCE

Technical Co-Founder & CEO | Intelligent DataWorks Inc. | Boston, MA | Aug 2023 - Present

Co-founded an applied AI SaaS company and remains hands-on in architecture, coding, integration, deployment, and production platform development.

- Architected and helped build AssistX, a production-grade GenAI platform delivering 70+ AI automations across more than 20 HR and business workflows with LLMs, AI agents, multi-agent patterns, RAG, and AWS.
- Implemented full-stack platform capabilities with Python, FastAPI, PostgreSQL/PGVector, LangChain, LangGraph, APIs, vector search, cloud infrastructure, and multi-tenant SaaS patterns.
- Designed controlled and versioned prompts, input validation, prompt-injection protections, workflow guardrails, and evaluation-oriented platform foundations.
- Delivered the first commercial release within eight months, gained hundreds of user signups at launch, accelerated selected workflows by up to 50x, and technically led an 11-engineer Agile team while continuing hands-on development.
- Initiated strategic acquisition discussions regarding IDW's AI platform as part of a planned transition to a senior AI/engineering leadership role.

Sr. Director of Engineering, Workforce Management Service | SuccessKPI | Chantilly, VA | Jun 2022 - Aug 2023

Led hands-on architecture and production delivery for an AI-powered workforce-management SaaS platform on AWS.

- Translated detailed product requirements into AWS architecture, algorithms, service design, implementation work, automated testing, CI/CD, and sprint delivery.
- Built AI-driven forecasting, optimization, scheduling, analytics, and workflow capabilities integrated with Amazon Connect, Genesys, and Talkdesk.
- Delivered the initial production platform within six months and onboarded flagship enterprise customers, including a major government services organization.

Sr. Director, Data Analytics & Operations | TriMark USA | Mansfield, MA | Aug 2021 - May 2022

Modernized enterprise data and analytics across a \$1B+ organization with 11 acquired divisions and heterogeneous ERP systems.

- Gathered and prioritized 50+ cross-functional use cases, defined the AWS data-platform architecture, and delivered TriMark's first AWS data lake within seven months, reducing cross-ERP reporting from roughly two months to one day.

Head of Cloud Software & Technical Leadership, Data, Privacy and AI Governance | MassMutual | Boston, MA | Nov 2020 - Aug 2021

Led architecture and implementation across enterprise Data Privacy, AI Governance, and Responsible AI initiatives in a regulated insurance environment.

- Worked across five governance projects spanning privacy-rights management, enterprise metadata, adaptive policy, governance APIs, and AI Governance & Ethics architecture.
- Advised on MLOps and Responsible AI architecture, including model transparency, bias detection, drift monitoring, testing, and SageMaker-based governance approaches.
- Delivered a cloud-native Privacy Rights Management platform within eight months, automating approximately 90% of a manual workflow for CCPA, CPRA, GDPR, and related regulations.

VP AI/ML | NorthBay Solutions | Jan 2019 - Nov 2020

Role ended in company-wide COVID layoff.

Recruited from AWS to establish an AI/ML consulting practice while remaining hands-on in reusable cloud AI platform development.

- Pitched and secured approval for an AWS Data Lake + ML Accelerator SaaS product, built the initial full-stack system, and guided distributed engineering toward customer demonstrations.
- Advised enterprise customers on AI, ML, data strategy, solution architecture, and production AWS implementations.
- Delivered Dun & Bradstreet's first AWS Neptune knowledge graph aggregating complex business hierarchy data.

Sr. Specialist Solutions Architect, AI/ML and Big Data & Analytics | Amazon Web Services | Boston, MA | May 2015 - Dec 2018

Helped establish and scale AWS enterprise AI/ML and analytics specialist capabilities during early production adoption of SageMaker and cloud machine learning.

- Advised more than 200 enterprise customers on AI/ML strategy, SageMaker, TensorFlow, data lakes, production architectures, and AWS adoption.
- Built hands-on AI and analytics solutions and enablement using SageMaker, TensorFlow, EMR/Spark, Glue, S3, Lambda, and Step Functions.
- Created 170+ technical assets, trained 180+ solution architects, and earned AWS ML Elite Gold and Platinum recognition.

SELECTED REGULATED HEALTH TECHNOLOGY EXPERIENCE

- As Director of Software at Dimensional Photonics, delivered an FDA-cleared digital-dentistry device and HIPAA-regulated AWS cloud platform to market; built the fault-tolerant Lythos device-to-cloud platform within four months with APIs, analytics, monitoring, security, and production operations.

EDUCATION

- Ph.D., Molecular Biology / Microbiology & Immunology, University of Western Ontario, Canada; Canadian Medical Research Council Post-Doctoral Research Fellowship.

TECHNOLOGIES

Generative AI • Large Language Models • Agentic AI • AI Agents • Multi-Agent Systems • Amazon Bedrock AgentCore
AWS SageMaker • AWS AI/ML Services • Python • FastAPI • PostgreSQL • PGVector • LangGraph • LangChain • RAG
Vector Search • Workflow Orchestration • REST APIs • AWS Lambda • Amazon S3 • AWS Glue • AWS CDK • CI/CD
Automated Testing • Docker • Kubernetes • Evals • Guardrails • MLOps • Model Governance • Model Transparency
Bias Detection • Drift Detection • TensorFlow • Spark • EMR • SQL • Data Lakes • EventBridge • IAM • Auditability