

Keith Steward, Ph.D.

Agentic AI Delivery Lead | Enterprise AI Platform Architect

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[LinkedIn](#) | IntelligentDataWorks.ai | [IDW LinkedIn](#)

PROFILE

Hands-on agentic AI delivery leader who turns complex business and data needs into secure production systems and reusable engineering patterns. Combines LLM application architecture, RAG, vector search, MCP, multi-agent orchestration, Python, cloud-native delivery, governance, and observability with technical roadmap ownership. Built an 11-engineer team and shipped a platform supporting 70+ automations across more than 20 workflows; advised 200+ AWS enterprises. Brings the judgment to move Generative AI from discovery through governed deployment, adoption, and reliable operations.

SELECTED QUALIFICATIONS

- **Agentic AI Architecture:** LLM applications, RAG, embeddings, vector search, tool-enabled agents, MCP, orchestration, structured workflows, and human oversight
- **Production Engineering:** Python, APIs, distributed systems, automated testing, CI/CD, containers, security, telemetry, resilience, and cloud operations
- **Responsible AI:** evaluation, groundedness, transparency, bias and drift monitoring, privacy, IAM, auditability, release controls, and incident readiness
- **AI-Native Delivery:** opportunity discovery, roadmaps, reusable patterns, technical reviews, cross-functional execution, adoption, and measurable outcomes

PROFESSIONAL EXPERIENCE

Technical Co-Founder | Intelligent DataWorks | Boston, MA | Aug 2023 to Present

Own agentic AI architecture, product delivery, engineering standards, cloud operations, and adoption while remaining hands-on.

- Architected and helped build AssistX, a production agentic-AI platform using Python, FastAPI, PostgreSQL/PGVector, LLMs, RAG, agents, APIs, LangChain, LangGraph, orchestration, and AWS services.
- Delivered the first commercial release within eight months; the platform supports 70+ automations across more than 20 workflows and accelerates selected work by up to 50x.
- Used agentic coding and code-generation tools for more than half of platform development while recruiting and technically leading an 11-engineer Agile team through architecture, implementation, review, and production operations.
- Established reusable foundations for multi-agent workflows, MCP, vector search, controlled and versioned prompts, input validation, prompt-injection protection, human oversight, security, and observability.
- Built and deployed a customer-service AI agent with AWS Bedrock AgentCore and Strands using AWS CDK, extending hands-on experience with tool-enabled agents and cloud-native delivery.
- Initiated strategic acquisition discussions regarding IDW's AI platform as part of a planned transition to a senior AI/engineering leadership role.

Senior Director of Engineering | SuccessKPI | Remote | Jun 2022 to Aug 2023

Directed architecture and engineering for an AI-powered Workforce Management SaaS product, translating product requirements into production capabilities.

- Recruited and led a seven-person distributed team delivering forecasting, optimization, scheduling, analytics, and automated communications on AWS.
- Converted detailed product requirements into architecture, algorithms, APIs, automated testing, CI/CD, cloud operations, and two-week Agile releases.
- Delivered the first working release within six months for two flagship enterprise customers and expanded the platform to additional large organizations.

Senior Director, Data Analytics & Operations | TriMark USA | Mansfield, MA | Aug 2021 to May 2022

Owned enterprise data modernization for a \$1B+ organization integrating 11 acquired businesses and heterogeneous ERP systems.

- Prioritized 50+ analytics use cases with business and technology leaders and secured support for an AWS enterprise data strategy.
- Upskilled four analysts and grew the team to seven AWS engineers with hiring, mentoring, planning, risk, and delivery accountability.
- Delivered the first AWS data lake within seven months and reduced cross-ERP reporting from roughly two months to one day.

Technical Lead, Cloud Data Privacy & AI Governance | MassMutual | Boston, MA | Nov 2020 to Aug 2021

Led secure cloud architecture and hands-on implementation across five enterprise Data Privacy and AI Governance initiatives.

- Converted policy and product requirements into secure AWS architecture, APIs, infrastructure automation, automated testing, CI/CD, and production releases.
- Delivered the first cloud-native privacy-rights platform within eight months, automating approximately 90% of a manual workflow.
- Guided model-governance practices spanning evaluation, transparency, bias, drift, monitoring, auditability, lifecycle controls, security, and human oversight.
- Partnered with Enterprise Architecture and SRE on IAM, least-privilege patterns, managed services, resilience, and repeatable cloud operating standards.

VP of AI/ML | NorthBay Solutions | Boston, MA | Jan 2019 to Nov 2020 | (Role ended in company-wide COVID layoff).

Recruited out of AWS by the NorthBay Solutions CEO to establish a new AI/ML practice and reusable production data-and-ML capability.

- Built an AWS Data Lake and ML accelerator hands-on with Python, Django, React, APIs, and AWS, then directed a 24-person remote team toward delivery.
- Delivered an AWS Neptune knowledge graph integrating complex hierarchical enterprise data and expanded reusable cloud and AI architectures for customers.
- Advised enterprise customers on AI strategy, data platforms, knowledge graphs, solution architecture, and production implementation.

Senior Specialist Solutions Architect, AI/ML & Big Data | Amazon Web Services | Boston, MA | May 2015 to Dec 2018

Advised enterprises and AWS teams on production machine learning, distributed analytics, data platforms, and cloud adoption.

- Advised 200+ enterprises on AI/ML strategy, production architecture, SageMaker, data lakes, distributed systems, security, and scalable adoption.
- Created and led global Big Data and AI/ML communities, developing 180+ specialists through standards, mentoring, workshops, and reusable assets.
- Built a SageMaker and TensorFlow forecasting hackathon for Morgan Stanley data scientists and created 170+ technical enablement assets.
- Delivered 50+ technical presentations and workshops and earned AWS ML Elite Gold and Platinum recognition.

EARLIER RELEVANT EXPERIENCE

- At Dimensional Photonics, led an FDA-cleared, HIPAA-regulated connected health product and built its fault-tolerant AWS/Cassandra cloud platform hands-on.
- Brought five commercial SaaS products to market across AI, workforce technology, bioinformatics, and regulated connected systems.

EDUCATION & RECOGNITION

Ph.D., Molecular Biology / Microbiology & Immunology, University of Western Ontario. AWS ML Elite Gold and Platinum; AWS re:Invent Rockstar; named inventor on multiple patents.

TECHNOLOGIES

LLM applications • RAG • embeddings • vector search • AI agents • multi-agent systems • MCP • LangGraph • LangChain • prompt engineering • AI evaluation • AI observability • human oversight • Python • FastAPI • REST APIs • distributed systems • automated testing • CI/CD • Docker • Kubernetes • AWS • AWS Bedrock AgentCore • SageMaker • AWS CDK • EventBridge • Step Functions • IAM • security • AI governance • model governance • auditability • PostgreSQL • PGVector • data platforms • data lakes • Spark • EMR • knowledge graphs • workflow orchestration