

Keith Steward, Ph.D.

AI & Data Technical Leader | Enterprise Cloud Solutions Architect

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

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

PROFILE

AI and data technical leader who converts business requirements into secure, production-ready platforms spanning Generative AI, machine learning, data engineering, analytics, and cloud. Combines hands-on architecture with distributed-team leadership, design review, delivery risk management, and client communication. Built an 11-engineer team and a platform supporting 70+ automations across more than 20 workflows, while advising 200+ AWS enterprises. Brings player-coach judgment to guide multidisciplinary teams and deliver measurable value across complex initiatives.

SELECTED QUALIFICATIONS

- **AI & Data Architecture:** solution design, data modeling, pipelines, analytics, machine learning, Generative AI, LLMs, RAG, vector search, and MLOps
- **Production Engineering:** scalable APIs, cloud deployments, integrations, security, testing, CI/CD, observability, reliability, optimization, and technical risk management
- **Technical Leadership:** architecture reviews, engineering standards, distributed teams, mentoring, Agile execution, dependency management, and quality accountability
- **Client Delivery:** discovery, requirements translation, stakeholder communication, estimates, solutioning, technical proposals, and strategy-through-production ownership

PROFESSIONAL EXPERIENCE

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

Own hands-on AI and data architecture, engineering execution, cloud operations, governance, and product delivery.

- Architected and helped build AssistX using LLMs, RAG, AI agents, LangChain, LangGraph, Python, FastAPI, PostgreSQL/PgVector, REST APIs, vector search, and AWS.
- Delivered the first commercial release within eight months; 70+ automations across more than 20 workflows accelerate selected work by up to 50x.
- Recruited and technically led an 11-engineer Agile team, reviewing architecture, designs, integrations, cloud deployments, security, quality, and delivery risks while remaining hands-on.
- Implemented an AWS Bedrock AgentCore customer-service agent with CDK and established reusable patterns for orchestration, evaluation, observability, input validation, and prompt-injection protection.
- 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 contact-center Workforce Management SaaS product.

- Translated detailed product requirements into AWS architecture, data pipelines, forecasting, optimization, integrations, algorithms, and engineering work breakdown.
- Recruited and led a seven-person distributed team that delivered the initial workforce-management SaaS release within six months and onboarded enterprise and government customers.
- Established Agile, testing, CI/CD, design review, quality, and mentoring practices for a production platform integrated with Amazon Connect, Genesys, and Talkdesk.

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.

- Gathered and prioritized 50+ analytics use cases across Marketing, Supply Chain, Finance, and technology teams and translated them into an AWS data-platform strategy and roadmap.
- Upskilled four analysts and grew the team to seven AWS engineers, providing architecture, technical standards, planning, risk management, mentoring, and accountable delivery.
- Delivered the first enterprise data lake within seven months, integrating 11 heterogeneous ERP systems and reducing 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 architecture and hands-on implementation across five enterprise Data Privacy and AI Governance initiatives.

- Led AWS architecture and implementation across five data-privacy and AI-governance initiatives, partnering with product, Enterprise Architecture, SRE, governance, and ethics teams.

- Established reusable patterns for APIs, event-driven integration, IAM, security, CI/CD, CDK, monitoring, data governance, model transparency, bias, and drift detection.
- Delivered a privacy-rights platform within eight months that automated approximately 90% of a formerly manual workflow.

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, data pipelines, and cloud services, then led a 24-person distributed team toward commercial delivery.
- Advised enterprise clients on AI/ML, data engineering, analytics, knowledge graphs, solution architecture, and production implementation.
- Delivered an AWS Neptune knowledge graph aggregating complex hierarchical enterprise data and expanded reusable cloud and AI architectures for customers.

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 and technical leaders on machine learning, data engineering, analytics, data lakes, cloud architecture, and production adoption.
- Created global Big Data/Analytics and AI/ML Technical Field Communities totaling 180+ specialists, establishing standards, design guidance, mentoring, and field readiness.
- Built hands-on solutions using SageMaker, TensorFlow, EMR, Spark, Presto, Athena, Glue, S3, Lambda, and Step Functions and translated customer requirements into scalable architectures.
- Developed 170+ technical assets, trained 180+ Solution Architects, and delivered 50+ presentations and workshops, earning AWS ML Elite Gold and Platinum recognition.

EARLIER RELEVANT EXPERIENCE

- At Dimensional Photonics, led an FDA-cleared connected product and built its fault-tolerant AWS/Cassandra cloud platform hands-on, spanning APIs, integrations, monitoring, and analytics.
- Commercialized five SaaS and cloud products across applied AI, workforce technology, data platforms, scientific software, 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

Artificial Intelligence • Machine Learning • Data Engineering • Analytics • Data Architecture • data modeling • cloud analytics • Generative AI • LLMs • RAG • vector databases • MLOps • AWS • SageMaker • Databricks • Snowflake • Spark • Python • SQL • data platforms • data lakes • ETL pipelines • REST APIs • FastAPI • PostgreSQL • PGVector • LangChain • LangGraph • AI agents • TensorFlow • Docker • Kubernetes • CI/CD • AWS CDK • Kafka • observability • security • IAM • distributed systems • Agile delivery