

Keith Steward, Ph.D.

Enterprise AI Executive | Life Sciences, Platforms & Responsible AI

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

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

PROFILE

Enterprise AI executive and hands-on technologist with 25+ years turning machine learning, data, cloud, and Generative AI into durable products, platforms, and operating capabilities. Combines AI strategy, organizational leadership, portfolio governance, MLOps, Responsible AI, and executive partnership with unusually deep life-sciences and bioinformatics experience. Has built teams as large as 25, advised 200+ enterprises, launched six commercial software products, and currently leads 11 engineers operating 70+ AI automations with 99.9% availability.

SELECTED CAREER HIGHLIGHTS

- Defined enterprise AI strategies, investment roadmaps, operating models, use-case portfolios, architecture standards, governance controls, and measurable adoption plans across startups, consulting engagements, AWS customers, and regulated enterprises.
- Built and led engineering organizations as large as 25 people, including managers, with responsibility for hiring, mentoring, budgets, roadmaps, vendors, delivery standards, executive communication, and cross-functional alignment.
- Architected and operated production AI platforms spanning LLMs, agents, RAG, MLOps/LLMOps, evaluation, observability, auditability, security, model routing, CI/CD, and resilient cloud operations.
- Brings direct pharmaceutical, biotechnology, genomics, bioinformatics, and scientific-software experience, including early AI for drug-target evaluation and original development of a globally adopted pathway-analysis product.
- Advised more than 200 enterprises on AI/ML, data platforms, cloud architecture, and adoption; built AWS technical communities totaling 180+ specialists and created 170+ enablement assets.
- Built the AssistX core and first 80% of its initial application hands-on, then led 11 engineers around 70+ automations across more than 20 workflows with 99.9% availability.

PROFESSIONAL EXPERIENCE

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

Set AI strategy and lead an engineering organization while remaining hands-on in platform architecture, governance, product delivery, and operations.

- Recruited and led 11 engineers selected from more than 400 applicants; established onboarding, architecture training, Agile sprints, mentoring, code review, delivery priorities, and production standards.
- Built the AssistX core and first 80% of its initial application hands-on using Python, FastAPI, LLMs, agents, RAG, PostgreSQL/PGVector, APIs, Docker, AWS, and CDK.
- Delivered 70+ automations across more than 20 workflows, accelerating selected work by up to 50x while sustaining 99.9% availability.
- Established AI evaluation, LLM-as-judge, guardrails, observability, auditability, model routing, cost controls, security, CI/CD, release, and incident-response practices.
- Own a \$900,000 budget, staffing, product and technical roadmaps, architecture, releases, cloud operations, and executive decisions across the venture.
- 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 | SuccessKPI | Remote | Jun 2022 to Aug 2023

Built and led engineering for a new AI-powered workforce-management platform within a cloud-native enterprise SaaS company.

- Recruited and mentored eight engineers and one manager, with responsibility for performance reviews, compensation decisions, delivery standards, staffing, architecture, and roadmap execution.
- Directed a distributed Agile organization through production launch for four large customers, including the U.S. Departments of State and Education.
- Designed forecasting, machine-learning, optimization, and scheduling capabilities integrated with Amazon Connect, Genesys, and Talkdesk.

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

Built the cloud data organization and operating model supporting enterprise analytics across a \$1B+ company and 11 divisions.

- Upskilled an initial four-person analytics team and expanded it into a seven-member AWS engineering organization with additional contractors.

- Aligned executives around more than 50 use cases and delivered the first enterprise data lake within ten months, reducing reporting from roughly two months to one day.
- Owned staffing, performance reviews, architecture, delivery planning, risk, change management, executive reporting, and cross-functional priorities.

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

Led architecture and engineering across privacy, governance, Responsible AI, data, and cloud initiatives in a regulated enterprise.

- Guided five initiatives spanning policy automation, model transparency, bias, drift, monitoring, human oversight, auditability, data governance, and governance APIs.
- Partnered with Enterprise Architecture and SRE on AWS, security, IAM, CI/CD, event-driven, container, and infrastructure-as-code standards.
- Delivered a cloud-native privacy 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 from AWS by the CEO to build an enterprise AI/ML consulting practice and reusable cloud delivery capabilities.

- Led an 18-person distributed engineering team delivering the Data Lake Accelerator while remaining hands-on in initial product architecture and implementation.
- Advised enterprise clients on AI, ML, data, platform strategy, architecture, and production delivery across concurrent consulting engagements.
- Combined executive advisory, staffing, reusable standards, cloud architectures, and production systems for enterprise customers.

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

Helped establish and scale AWS AI/ML and data specialist capability while advising enterprise customers on production adoption.

- Advised more than 200 enterprises across North America on AI/ML, data platforms, architecture, governance, cloud adoption, and business outcomes.
- Founded and led technical communities totaling 180+ specialists, created 170+ enablement assets, and established standards and reusable client practices.
- Delivered 36 invited presentations, trained 180+ architects, and earned AWS ML Elite Gold and Platinum recognition.

EARLIER RELEVANT EXPERIENCE

- Original developer of Ingenuity Pathway Analysis, a commercial bioinformatics platform adopted by biotechnology, pharmaceutical, academic, and government research organizations.
- Developed BioWizard, an AI system using 400 inferencing rules and the UMLS Medical Ontology to emulate scientist evaluation of genomic drug targets; a patent application was submitted.
- Developed bioinformatics analysis software at Wyeth Research and led life-sciences informatics, genomics, and molecular-diagnostics teams across multiple companies.

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

AI strategy • enterprise AI • machine learning • Generative AI • LLMs • AI agents • RAG • MLOps • LLMOps • AI governance • Responsible AI • AI evaluation • observability • auditability • model explainability • bias detection • drift monitoring • portfolio management • operating models • budgeting • vendor management • executive advisory • organizational leadership • Python • AWS • SageMaker • Amazon Bedrock • Google Vertex AI • LangChain • LangGraph • PostgreSQL • PGVector • data platforms • data governance • cloud architecture • CI/CD • Docker • Kubernetes • bioinformatics • genomics • pharmaceutical research • UMLS Medical Ontology • product commercialization