

Keith Steward, Ph.D.

AI Architecture & Engineering Executive | Enterprise Platform Builder

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

PROFILE

AI engineering executive who turns ambiguous operating mandates into governed, production AI platforms, reusable architecture, and measurable workflow outcomes. Combines hands-on LLM, agentic workflow, RAG, API, cloud, data, DevSecOps, observability, security, and AI governance depth with executive partnership and lean team building. Built an 11-engineer AI organization and a platform supporting 70+ automations across more than 20 workflows, while previously advising 200+ AWS enterprise customers. Brings the judgment to modernize outsourced delivery into product-minded engineering capability.

SELECTED QUALIFICATIONS

- **AI Architecture & Automation:** LLM applications, agentic workflows, RAG, prompt and context strategies, retrieval patterns, enterprise copilots, business-aligned automation, and AI governance
- **Engineering Platforms:** shared services, APIs, integration patterns, reusable platform capabilities, cloud systems, DevSecOps, CI/CD, observability, testing, security, code quality, and access control
- **Forward-Deployed Execution:** workflow discovery, product-minded engineering, operating-division partnership, measurable outcomes, adoption, ROI measurement, token optimization, and technical debt reduction
- **Executive & Team Leadership:** lean AI team building, architecture review, vendor evaluation, roadmap alignment, OKR-oriented execution, and CEO/CIO/stakeholder communication

PROFESSIONAL EXPERIENCE

Technical Co-Founder & CEO | Intelligent DataWorks | Boston, MA | Aug 2023 to Oct 2026

Lead AI product strategy, architecture, engineering execution, and operations while remaining hands-on in platform development.

- Architected and helped build AssistX, a production AI platform combining Python, FastAPI, PostgreSQL/PGVector, SQL, LLMs, AI agents, RAG, APIs, workflow orchestration, evaluation, and AWS services.
- Delivered the first commercial release within eight months, supporting 70+ AI automations across more than 20 HR and business workflows and accelerating selected work by up to 50x.
- Recruited and technically led an 11-engineer Agile organization while contributing directly to backend services, cloud infrastructure, orchestration, data pipelines, security, and operations.
- Established reusable foundations for controlled prompts, input validation, prompt-injection protection, human review, observability, model selection, cost controls, and multi-tenant SaaS delivery.
- Implemented Labor Law retrieval for all 50 states and an AI-driven marketing automation system integrating SuiteCRM, SendGrid, and custom workflow logic.
- 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 engineering and architecture for an AI-powered contact-center Workforce Management SaaS product.

- Recruited and led an eight-engineer team plus a manager delivering ML forecasting, operations-research optimization, scheduling, analytics, visualization, and automated communications on AWS.
- Translated product requirements into cloud architecture, algorithms, data flows, APIs, work breakdown, testing, CI/CD, and iterative production releases.
- Designed forecasting models to predict call volumes and linear-programming workflows to generate staffing schedules for large contact-center operations.
- Delivered the working production platform for four enterprise and government customers, including State Department, Department of Education, Avon, and De'Longhi.

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 Finance, Marketing, Supply Chain, and technology leaders and secured support for an AWS data strategy.
- Upskilled four analysts and grew the team to seven AWS engineers with hiring, mentoring, planning, budget, risk, and delivery accountability.

- Established nightly data ingestion, cataloging, consolidation, normalization, and global querying across 11 geographically distributed ERP environments.
- 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 architecture and hands-on implementation across five enterprise Data Privacy and AI Governance initiatives.

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

Vice President, 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.

- Proposed an AWS Data Lake and ML accelerator, built the initial full-stack platform hands-on using Python, Django, React, APIs, and AWS, then directed an 18-person remote team toward customer demonstrations.
- Advised enterprise customers including Dun & Bradstreet, Harvard Business School, 1091 Media, and Invesco on AI strategy, data platforms, knowledge graphs, APIs, and production AWS architecture.
- Delivered an AWS Neptune knowledge graph integrating 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 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 MassMutual, led privacy and AI-governance initiatives spanning model transparency, bias, drift, monitoring, auditability, human oversight, security, and data governance.
- At TriMark, aligned leaders across 11 businesses around more than 50 analytics use cases and delivered an enterprise data lake within ten months, reducing reporting from roughly two months to one day.
- At AWS, advised more than 200 enterprise customers on AI/ML, data platforms, distributed cloud architecture, governance, security, and production adoption.

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 architecture • enterprise AI • AI governance • agentic workflows • AI agents • LLM applications • RAG • prompt strategies • context management • retrieval patterns • enterprise copilots • business-aligned automation • workflow automation • ROI measurement • token optimization • API architecture • shared services • integration patterns • platform capabilities • forward-deployed engineering • DevSecOps • CI/CD • observability • testing • security • access control • code quality • technical debt • AWS • Amazon Bedrock • SageMaker • Python • FastAPI • REST APIs • PostgreSQL • PGVector • LangChain • LangGraph • Docker • Kubernetes • AWS CDK