

Keith Steward, Ph.D.

Enterprise Applied AI | Solution Architecture & Integration

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

PROFILE

Hands-on enterprise technology architect who translates business problems into secure, scalable AI systems and practical technical roadmaps. Combines LLMs, RAG, agents, vector retrieval, Python, APIs, cloud-native architecture, enterprise data, responsible-AI controls, and stakeholder communication with production delivery. Built the AssistX core platform and helped deliver 70+ AI automations across more than 20 workflows, accelerating selected work by up to 50x. Brings the technical and consulting judgment to identify valuable opportunities and carry solutions from prototype into reliable operation.

CORE EXPERTISE

Applied AI • Generative AI • LLMs • RAG • AI Agents • Prompt Engineering • Vector Databases • Python • REST APIs • AWS • SageMaker • AI Governance • Security • Data Integration • Technical Roadmaps

SELECTED TECHNICAL IMPACT

- Translated more than 20 business workflows into 70+ production AI automations using LLMs, RAG, agents, vector search, Python, APIs, and AWS.
- Built the AssistX core platform and reusable architecture hands-on, connecting AI models with enterprise data, PostgreSQL/PGVector, business systems, and deterministic workflows.
- Implemented evaluation, guardrails, responsible-AI controls, security, observability, model selection, and cost management for reliable production operation.
- Advised 200+ AWS enterprises on AI, data, and cloud adoption, translating ambiguous goals into architectures, roadmaps, reusable patterns, and delivery decisions.

PROFESSIONAL EXPERIENCE

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

Architect and build AI product, platform, and cloud capabilities while guiding engineering execution and operations.

- Translated more than 20 business workflows into 70+ production AI automations using LLMs, RAG, agents, vector search, Python, APIs, and AWS.
- Built the AssistX core platform and reusable architecture hands-on, connecting AI models with enterprise data, PostgreSQL/PGVector, business systems, and deterministic workflows.
- Implemented evaluation, guardrails, responsible-AI controls, security, observability, model selection, and cost management for reliable production operation.
- Advised 200+ AWS enterprises on AI, data, and cloud adoption, translating ambiguous goals into architectures, roadmaps, reusable patterns, and delivery decisions.
- 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.

- Recruited and led an 11-person organization including a manager, with responsibility for hiring, coaching, performance reviews, bonus allocation, and a \$600,000 budget.
- Directed Agile delivery across security, data, platform, BI, and quality engineering, translating product priorities into forecasting, optimization, integrations, and releases.
- Delivered an AI-powered workforce-management SaaS product for enterprise and government customers using AWS, Python, PostgreSQL, forecasting, and optimization.

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.

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

- Built production AI, data, cloud, and integration platforms across startup and enterprise environments, including regulated insurance and health technology.
- Delivered TriMark's first AWS data lake across 11 acquired businesses, reducing cross-ERP reporting from roughly two months to one day.

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

Applied AI • Generative AI • LLMs • RAG • AI agents • prompt engineering • vector databases • embeddings • vector search • Python • FastAPI • REST APIs • microservices • enterprise integration • data pipelines • PostgreSQL • PGVector • AWS • Amazon Bedrock • SageMaker • AI evaluation • AI guardrails • responsible AI • AI governance • security • IAM • MLOps • observability • Docker • Kubernetes • CI/CD • AWS CDK • data lakes • Spark • Snowflake • workflow automation • technical roadmaps • stakeholder management • requirements gathering • solution architecture