

Keith Steward, Ph.D.

AI & Data Executive | Agentic AI Platform Leader

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EXECUTIVE PROFILE

AI, data, and engineering executive who builds production AI platforms, data foundations, and operating teams for complex businesses. Combines hands-on agentic AI architecture with executive-level strategy, governance, hiring, and business translation. Founded Intelligent DataWorks, created a production GenAI assistant platform with 70+ automations across 20+ workflows, directed teams up to 11 engineers, delivered enterprise data and governance systems, and advised 200+ AWS customers. Solves problems where operational workflows, analytics, data quality, and AI adoption must become trusted business systems.

SELECTED CAREER HIGHLIGHTS

- Founded and directed an AI startup and 11-engineer AI organization building production GenAI workflow software.
- Created AssistX, a production GenAI assistant platform using LLMs, AI agents, RAG, LangChain/LangGraph, PGVector, AWS, evaluation, and governance controls.
- Delivered TriMark USA's first AWS data lake across 11 ERPs, reducing cross-ERP reporting from roughly two months to one day.
- Led cloud engineering for MassMutual Data Privacy and AI Governance initiatives, including privacy workflow automation and responsible AI architecture guidance.
- Created AWS AI/ML and Big Data technical communities, trained 180+ global solution architects, and advised 200+ enterprise customers.
- Built AI/data teams and platforms from zero while staying hands-on in architecture, coding, cloud operations, and stakeholder communication.

PROFESSIONAL EXPERIENCE

Technical Co-Founder & CEO | Intelligent DataWorks inc | Aug 2023 to Present

Founded an applied AI SaaS company to commercialize enterprise GenAI assistants that combine business data, workflow automation, and production cloud architecture. Owns AI strategy, product vision, roadmap, architecture, engineering execution, security posture, customer validation, and strategic transition planning.

- Architected and built AssistX, a production-grade GenAI assistant platform using LLMs, AI agents, RAG, LangChain, LangGraph, PostgreSQL/PGVector, Python, FastAPI, APIs, workflow orchestration, and AWS cloud services.
- Recruited, trained, and directed an 11-engineer Agile AI development team while remaining hands-on in product architecture, backend systems, cloud deployment, AI orchestration, evaluation, and platform operations.
- Produced 70+ AI automations across 20+ HR and business workflows, improving selected workflows by up to 50x compared with manual execution.
- Delivered the initial production release within eight months, translating emerging LLM capability into a durable SaaS platform with reusable foundations for secure agentic workflows, RAG grounding, observability, and governance.
- Built executive narratives, demos, roadmap sequencing, and business-value messaging for enterprise workflow automation, recruiting, employee support, and HR policy assistance.
- 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 | Jun 2022 to Aug 2023

Recruited to build and lead engineering for a Workforce Management component of an AI-powered contact-center analytics SaaS platform. Directed architecture, hiring, product requirements, forecasting logic, optimization workflows, integrations, delivery, and AWS-based operations.

- Recruited and directed a seven-member distributed engineering team building forecasting, scheduling, visualization, and automated communication capabilities.
- Converted ambiguous product requirements into AWS architecture, API patterns, analytics workflows, release plans, and customer-facing SaaS functionality.
- Delivered the first working WFM release within six months for two flagship enterprise customers and championed early generative AI adoption across the platform.

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

Recruited to modernize enterprise data and analytics across a \$1B+ organization with 11 divisions and heterogeneous ERP systems. Partnered with marketing, supply chain, finance, IT, and senior leaders to prioritize more than 50 analytics use cases and KPIs.

- Secured support for an AWS data lake strategy enabling data engineering, analytics, master data management, and future machine learning capability.
- Upskilled an initial four-person analytics team and expanded delivery capability to a seven-member AWS engineering team with additional contractors.
- Delivered the first AWS data lake within seven months, automating nightly ingest, cataloging, consolidation, and normalization across 11 ERPs.
- Reduced cross-ERP reporting cycles from roughly two months of manual work to one day, creating a 60x improvement in insight delivery.

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

Established AWS architecture and hands-on implementation patterns for Data Privacy and AI Governance capabilities, including privacy rights management, enterprise data catalog, adaptive policy framework, governance APIs, and responsible AI initiatives.

- Coordinated product managers, enterprise architecture, privacy governance, AI governance, security stakeholders, site reliability, and developers to convert secure requirements into production cloud delivery.
- Provided MLOps and responsible AI guidance for model transparency, bias, drift detection, auditability, monitoring, lifecycle management, and governance approaches using Amazon SageMaker.
- Delivered a first cloud-native privacy rights platform in eight months, automating roughly 90% of a formerly manual workflow.

VP of Machine Learning & AI | NorthBay Solutions | Jan 2019 to Nov 2020 | (Role ended in company-wide COVID layoff).

Recruited out of AWS by the NorthBay Solutions CEO to head up a new AI/ML practice for enterprise customers and AWS-based product acceleration. Combined executive advisory, hands-on engineering, solution architecture, and delivery leadership.

- Generated CEO approval for an AWS Data Lake + ML Accelerator SaaS initiative, built the initial working system hands-on, and directed remote engineering toward customer demonstrations.
- Directed a remote engineering team building reusable cloud/data/AI assets for demonstrations and consulting delivery.
- Delivered AI/ML and analytics solutions for Dun & Bradstreet, Harvard Business School, Invesco, and other enterprise customers.

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

Promoted from Big Data and Analytics specialist into AWS's first senior AI/ML specialist role, helping establish enterprise adoption patterns for SageMaker, AI services, data lakes, analytics, and production cloud architecture.

- Founded and grew AWS internal AI/ML and analytics technical communities, enabling 180+ global solution architects and producing 170+ technical assets.
- Advised 200+ enterprise customers on AI strategy, ML, data lakes, analytics architecture, governance, SageMaker, TensorFlow, Glue, Athena, S3, Lambda, and production adoption patterns.
- Presented 50+ formal AI/ML and analytics sessions and earned AWS ML Elite Gold and Platinum recognition.

EARLIER RELEVANT EXPERIENCE

Developed commercial life-science, bioinformatics, cloud, imaging, and SaaS software across Ingenuity Systems, Wyeth Research, CambridgeSoft, Dimensional Photonics, Monsanto, Gene Logic, and related organizations. Helped develop Ingenuity Pathway Analysis, a widely adopted commercial bioinformatics product supporting biological pathway and molecular-network analysis. Earned multiple patents, including the BioWizard intelligent-agent architecture patent application for genomic knowledge discovery.

EDUCATION

Ph.D., Molecular Biology / Microbiology & Immunology, University of Western Ontario, Canada. Hon. B.Sc., Microbiology & Immunology, University of Western Ontario, Canada. Canadian Medical Research Council Post-Doctoral Research Fellowship.

TECHNOLOGIES

agentic AI • AI agents • LLMs • generative AI • RAG • LangChain • LangGraph • evaluation • observability • guardrails • responsible AI • model governance • MLOps • MLflow • SageMaker • TensorFlow • Spark • EMR • Athena • Glue • S3 • Lambda • Step Functions • EventBridge • API Gateway • Aurora Serverless • Redshift • Kafka • AWS Control Tower • AWS CDK • CloudFormation • Kubernetes • Docker • Python • FastAPI • Flask • SQL • PostgreSQL • PGVector • REST APIs • Git • CI/CD • data lakes • data pipelines • analytics • workflow automation • optimization • knowledge graphs • AWS Neptune • Linux