

Alex Hardman

Inventor | Engineer | Leader | Disruptor

Engineering Leader and **Platform Architect** with deep enterprise roots and startup-speed instincts. Known for leading high-performing teams, building experimentation platforms serving **50B+ user experiences annually**, and scaling real-time systems to 50M+ daily lookups. **Patented inventor**, **hackathon winner**, and **global conference speaker** (AWS re:Invent, QCon). Energetic, empathetic, and relentlessly curious, I operate at the intersection of technical precision and human connection, turning complexity into capability and helping teams deliver with clarity, speed, and impact.

Personal Info

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Awards & Recognition

01/2023

Inventor on U.S. Patent 11,562,416
USPTO
<https://bigalexenergy.com/patents/rgc>

Inventor on a patented system that automated digital gift card acquisition and redemption, enabling real-time fulfillment and improving speed, reliability, and customer experience across enterprise-scale rewards programs.

08/2025

Winner - Klaviyo AI Hackathon (2025)
Klaviyo
<https://bigalexenergy.com/hackathons/viyo>

Led a team to design and prototype an AI-powered onboarding assistant in **72 hours**, selected as the top project out of **55 teams**. Accelerated engineer ramp from **30 days** to **4 days**, enabling faster contributions, earlier product releases, and projected \$1M+ in annual savings.

Conference Speaker
LaunchDarkly
<https://bigalexenergy.com/talks/aws-22>
<https://bigalexenergy.com/talks/qcon-23>

Regularly invited to premier conferences to deliver live demos and technical talks at AWS re:Invent, QCon London, and LaunchDarkly Galaxy, bringing feature management to life for global engineering audiences.

Work Experience

07/2023
- 08/2025

Head of Experimentation & Optimization @ Klaviyo

- Directed strategy and re-architecture of Klaviyo's experimentation platform, powering **50B+ user experiences** annually across email, SMS, and onsite.
- Delivered a Go-based prototype that replaced Python bottlenecks, enabling **hundreds of millions of assignments in seconds: a 40x performance improvement**.
- Led design and launch of ML-driven features leveraging Bayesian optimization and personalization, driving measurable conversion gains.
- Launched **GenAI-powered subject line A/B testing**, boosting adoption by **50%+**, with users selecting AI suggestions in 82% of tests and beating original subject lines in 57% of campaigns.
- Authored a drop-in Redis→ElastiCache Serverless migration playbook, unlocking **five-figure annual savings** across the AI & Analytics pillar.
- Architected anomaly detection and forecasting workflows to improve data quality and enterprise planning, powered by Athena and Snowflake.
- Drove evolution of platform architecture to support extensibility and resilience, spanning EC2, Istio, Docker, DynamoDB, ElastiCache, and Apache Pulsar.
- Built and led a **high-performing team** of engineers and data scientists, mentoring multiple engineers to promotion and leadership roles.
- Interviewed **50+ candidates** across engineering and product roles; contributed directly to dozens of successful hires across the pillar through hands-on technical interviewing, sourcing, and leveling.

06/2022
- 07/2023

Developer Platform Advocate @ LaunchDarkly

- Built full-stack demo applications and architectural reference patterns showcasing feature flags, progressive delivery, and AWS Serverless adoption across modern engineering stacks.
- Translated complex platform capabilities into accessible, actionable patterns through system diagrams, live coding, and developer-first storytelling.
- Delivered technical talks on **platform resilience**, **incident response**, and **modernization strategy** to global engineering audiences, reaching thousands through international conferences and online events, including:
 - "Security Incident Monitoring, Mitigation & Metrics Using Feature Flags"**
AWS re:Invent, Las Vegas, 2022 (600+ live attendees)
 - "Raising the Bar on Resilience: Designing Systems for Resilience at Scale"**
QCon, London, 2023
 - "Mitigating the Madness of Migration in Modernization"**
LaunchDarkly Galaxy, Chicago, 2023
 - "Talking Migration with LaunchDarkly: How to Ship Platforms as Features"**
Live webinar
- Redesigned LaunchDarkly's architecture page and created technical enablement content that brought clarity and confidence to engineering leaders and buyers.

03/2021
- 06/2022

Senior Engineering Manager @ Capital One

- Led the team of engineers behind Capital One Shopping's **real-time price comparison** engine, serving **50M+ lookups daily** and billions of transactions.
- Architected and scaled distributed systems to support **millions of daily active users**, leveraging Docker, Node.js, PostgreSQL, Redis, and Cassandra.
- Launched a **real-time hotel shopping experience** with geospatial search; cut reference data load times by **320x (8 hours → 90 seconds)**, eliminating stale data and weekly downtime.
- Inventor on **U.S. Patent 11,562,416**, automating digital gift card acquisition and redemption to enable real-time fulfillment and improve reliability, speed, and customer experience at enterprise scale.

12/2013

Winner - Liberty Mutual Hackathon (2013)

Liberty Mutual

https://bigalexenergy.com/hackathons/limu

Led a team to develop an Android app that detected auto accidents using the accelerometer, automatically called for help using voice interactions, and initiated a First Notice of Loss (FNOL) claim. Recognized as the winning project for technical innovation and real-world customer impact.

Skills

Architecture & Leadership
Distributed Systems
Event-Driven Architecture
Serverless Design
Experimentation Platforms
Cost Optimization

Cloud & Data
AWS Lambda
EventBridge
DynamoDB
S3
Athena
ElastiCache
Docker
Snowflake
Pulsar
SQL/NoSQL Databases

Languages & Frameworks
Go
Node.js/JavaScript
React
Java

03/2019
- 03/2021

Platform Architect (Director level) @ Liberty Mutual Insurance

- Directed the architecture for a serverless, event-driven backbone that unified workflows across Liberty's \$6B Specialty insurance platform using API Gateway, DynamoDB, Lambda, EventBridge, SNS, and SQS. Connecting legacy systems and cloud-native no-code platforms, enabling teams to integrate with looser coupling.
- Championed modernization** across the org, bridging policy administration and underwriting with cloud-native, loosely coupled services.
- Mentored engineers, tech leads, scrum masters, and product owners across multiple squads; helped managers and directors navigate **cloud transformation, system integration**, and agile delivery at enterprise scale.
- Partnered with business stakeholders to align engineering and product priorities; influenced **org-wide strategy for modernization and integration velocity**.
- Delivered **internal accelerators using AWS CDK**, reusable **serverless modules**, and **CLI plugins** that reduced service onboarding from weeks to days and scaled serverless adoption across the org.
- Shaped the data architecture strategy across DynamoDB, and relational databases; designed secure APIs with API Gateway, Lambda, and S3 that balanced responsiveness, delivery speed, and reliability.
- Introduced **modern automated testing practices** with Playwright, Node.js, and Jest, cutting test cycles from days to minutes.

08/2018
- 03/2019

Lead Software Engineer @ EBSCO Information Systems

- Led adoption of the Auth0 authentication platform to modernize access control across internal services, mentoring engineers through integration patterns that supported thousands of requests per second.

07/2017
- 07/2018

Full Stack Solutions Engineer @ Liberty Mutual Insurance

- Served as a founding engineer in **Liberty Mutual's Boston Tech Hub**, bringing startup-speed execution to a century-old enterprise and laying the groundwork for a modern engineering culture.
- Led **cross-functional teams** in the design and delivery of customer-facing claims systems built with Node.js, GraphQL, and React on AWS.
- Mentored engineers through **platform decisions, testing practices**, and **API design** as the org shifted toward full-stack autonomy.
- Conducted **proofs of concept** for modern **test automation** platforms and led the successful adoption of Cypress, enabling teams to ship an application rewrite with confidence **in just one week**.

06/2013
- 07/2017

Lead Software Engineer @ Liberty Mutual Insurance

- Led engineering work on Liberty's core claims platform modernization initiative a \$10M upgrade to the core claims platform supporting 6M+ home and auto claims annually.
- Partnered with business stakeholders to clarify complex requirements, guide architectural decisions, and support successful delivery across integration points.
- Mentored engineers and interns through testing strategies, platform design, and system integration across Java Spring Boot microservices.
- Introduced and evangelized Test-Driven Development (TDD) to elevate code quality, reduce regression risk, and accelerate velocity during the migration from Guidewire ClaimCenter v6 to v8.
- Collaborated across engineering, QA, and business domains to identify and resolve defects in core workflows and integration points, contributing to a stable cutover from legacy infrastructure.

01/2007
- 06/2013

Senior Software Engineer @ Liberty Mutual Insurance

Liberty Mutual Insurance

- Modernized integrations by migrating legacy systems to .NET-based services and APIs supporting commercial insurance customers.
- Reduced nightly reporting time from ~8 hours to ~2 hours across DB2, SQL Server, Sybase, and Hyperion workflows.

Education

Business Management, Summa Cum Laude, Bachelor of Science

Granite State College, Portsmouth