JAMES EARLYWINE

Staff Software Engineer • AWS / Serverless Architect • Senior Software Engineer

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PROFESSIONAL SUMMARY

Hands-on cloud architect and software engineer with 18 years of experience designing, building, modernizing, and operating production systems across news media, financial services, risk intelligence and cybersecurity platforms. Deep expertise in AWS, distributed and serverless architectures, identity and authorization, and developer platforms. Bridges architecture and implementation, leading cross-functional work from ambiguous requirements through reliable production delivery. Experienced with AI-assisted, specification-driven engineering.

TECHNICAL EXPERTISE

- **Architecture:** Distributed systems, AWS serverless, event-driven architecture, microservices, SaaS multi-tenancy, domain-driven design, application modernization, AWS Well-Architected Framework, technical design documentation
- **AWS & Cloud Platforms:** Lambda, API Gateway, EventBridge, SQS/SNS, Step Functions, ECS/ECR, EC2, S3, CloudFront, Cloudflare, Route 53, CDK, CloudFormation, CodeBuild/CodePipeline, GitOps, Docker
- **Security & Identity:** IAM, Cognito, OAuth 2.0/OIDC, RBAC, ABAC, federated identity, entitlement provisioning, DevSecOps, OWASP Top 10
- **Data & Integration:** PostgreSQL, SQL Server, MySQL, RDS/Aurora, DynamoDB, MongoDB/DocumentDB, OpenSearch, graph databases, ETL, custom cloud-native data pipelines
- **Software Engineering:** TypeScript, JavaScript, Node.js/Express, Python, Java/Spring Boot, React, Angular, CI/CD, automated testing, TDD, Kiro, AI-assisted/specification-driven development
- **Operations & Reliability:** CloudWatch, X-Ray, Splunk, OpsGenie, Grafana, observability, site reliability engineering, incident response, production support

ACTIVE CERTIFICATIONS

- **AWS Generative AI — Professional** (2026–2029)
- **Claude Certified Architect — Professional** (2026–2027)
- **AWS Solutions Architect — Professional** (2021–2028)
- **AWS DevOps Engineer — Professional** (2025–2028)
- **AWS Security — Specialty** (2021–2028)

PROFESSIONAL EXPERIENCE

Transcend Team — Senior Serverless Architect | Remote | Aug 2026 – Oct 2026

- Architected and built an AWS serverless operational control plane for over-the-air delivery of assets and configuration to an on-device, LLM-powered real-time iOS translation application.
- Established authentication and authorization and a loosely coupled, configuration-driven design for integration across customer environments; used Kiro and AI-assisted specifications to accelerate implementation, and co-authored Architecture Decision Records (ADRs) to preserve architectural intent across AI coding sessions.

  Technologies: AWS Lambda, AWS CDK, GovCloud, API Gateway, TypeScript, Lambda Authorizer, DynamoDB, S3, React, Shell + micro-frontends, Kiro, AI-assisted specification-driven engineering.

About this eight-week engagement: *The role was contingent on security clearance. When the project's staffing timeline changed, the team needed an immediately cleared engineer and moved forward before my clearance was completed.*

Take2 Consulting / Booz Allen Hamilton — Staff DevSecOps Engineer (Contract) | Remote | Dec 2025 – Jun 2026

- Architected and built an authorization control plane, extending existing service-level enforcement with auditing of operational changes and credit consumption across the Vellox product suite.
- Championed and secured consensus on OAuth 2.0 M2M authentication over API keys, demonstrating reduced exposure of long-lived credentials and minimal downstream integration effort through rapid implementation.
- Designed Cognito token enrichment to associate machine credentials with user identities and group memberships, extending API authorization to evaluate both group and scope claims.
- Piloted AI-assisted, specification-driven development as a repeatable engineering practice.

  Technologies: AWS Lambda, Cognito, OAuth 2.0, PostgreSQL, Python, Cursor, AI-assisted specification-driven engineering.

Moody's Analytics — Staff Software Engineer / Technical Lead | Remote | Jan 2022 – Jul 2025

- **Identity & Access Management —** Co-led the iterative architecture, prototyping, and implementation of an **attribute-based access control (ABAC)** platform. Collaborated with leadership to understand evolving product, subscription, and authorization requirements, **reducing access provisioning time from 12–36 hours to under two minutes.**
  - **Eliminated site-wide authorization outages** by replacing legacy services with elastic, cloud-native authorization backed by DynamoDB, technology-independent JSON policies, and resource indexes optimized for authorization-constrained queries.
  - Delivered shared authorization APIs adopted across engineering teams, **achieving P99 response latency under 50ms.**
  - Architected and implemented CDC pipelines to synchronize legacy authorization deltas with the new ABAC platform.
- **Site Reliability & Modernization —** Architected and built the Transitional Content Store (TCS), a read-through caching and content-management layer with custom operational controls. Pre-warmed the cache using four months of production URL traffic, shielding the legacy monolith from traffic spikes while insulating website functionality from backend outages.
  - Eliminated the dependency on SharePoint and enabled phased migration to Adobe Experience Manager (AEM) and ECS-hosted microservices; **maintained 99.99% site stability and reduced escalations from 1–2 weekly to one in six months.**
- **Cloud Infrastructure & Data Integration —**
  - Architected and built a self-service DynamoDB-to-OpenSearch ingestion platform with reusable AWS CDK templates and pluggable Lambda transformations, **enabling engineering teams to deploy customized search indexes in minutes.**
  - Architected and built the ingestion and orchestration foundation for a multi-team research pipeline, including API uploads, policy-controlled S3 landing zones, auditing, payload disaggregation, and event-driven per-record workflows.
  - Designed and implemented an event-driven text-to-speech processing pipeline to support web accessibility.
- **Technical Leadership & Emerging AI —** Collaborated across architecture, backend, testing, and observability guilds; built shared libraries and composable primitives to standardize and facilitate engineering practices across teams, consulted on early AI Copilot messaging infrastructure.

  Technologies: AWS Lambda, API Gateway, DynamoDB, DynamoDB Streams, EventBridge, SQS/SNS, OpenSearch, Step Functions, S3, CloudWatch, CDK, CloudFormation, CI/CD, CodeBuild/CodePipeline, ECS/ECR, TypeScript, Node, Python

Liberty Mutual — Senior Software Engineer | Remote | Jul 2019 – May 2021

- Contributed to the development of a new reinsurance platform, including service integrations, migration of legacy mainframe functionality to AWS, ETL, batch transaction processing, and back-office user experiences.

  Technologies: Java, Spring Boot, Spring Batch, TypeScript, Node.js/Express, React, SQL Server, PostgreSQL, Cloud Foundry, Bamboo, AWS EC2, S3, RDS, CDK/CloudFormation, API Gateway, and Lambda.

Gannett / The Indianapolis Star — Principal Developer, Special Projects | Indianapolis, IN | Aug 2013 – Sep 2017

- Sole developer on a special-projects team, translating advertising, newsroom and product concepts into deployed web applications, audience experiences and internal tools.
- Built the Indiana Sports Awards, Craft Beer Guide, Summer Camps Guide, Circle of Lights Coloring Book, The Finer Years and digital publications experiences; delivered advertiser integrations, community participation, and reusable campaign tooling.
- Owned application architecture, AWS hosting, CI/CD, Google Analytics, Adobe Omniture Analytics, third-party integrations, disaster recovery.

  Technologies: LAMP, PHP/Laravel, JavaScript, jQuery, Angular, Nginx, MySQL, EC2, ELB, S3, Jenkins, Chef, Gulp

SELECTED CONTRACT WORK

- **OneAmerica (Jun 2018 – Nov 2018):** Collaborated directly with the lead business stakeholder to understand requirements, design, develop, demonstrate, and deliver **a first-in-class Evidence of Insurability web application, ahead of schedule, with additional functionality.**

  Technologies: JavaScript, Backbone, Marionette, Bootstrap 3
- **ViewYou.com (2011–2014):** Sole developer at a video-resume startup, maintaining and extending its established platform, including partner integrations, search and site functionality, and cloud operations. Architected and built a reusable integration capability in ~30 hours, **enabling APLi to integrate in one day versus its original 3–6-month, $40K–$50K estimate.**

  Technologies: LAMP, PHP/Laravel, MySQL, MongoDB, HTML, CSS, jQuery, Nginx, TokBox, Viddler API, Stripe API, Jenkins

EDUCATION

- **Master of Business Administration (MBA), Finance & Marketing** — Butler University | 2013
- **Bachelor of Arts (BA), Philosophy & Economics** — Indiana University–Purdue University Indianapolis | 2009

SELECTED AWARDS

- **Moody's Digital Insights Hackathon** — 2nd Place, Team AI Innovation (2024)
- **Liberty Shine Award** — Quality Team Delivery, Liberty Mutual (2020)
- **IndyStar Customer Experience Award** — Indiana Sports Awards Platform (2015)