

Aaron Donoho ~ St. Louis, MO 63126 ~ aarondonoho@gmail.com ~ <https://aarondonoho.cv>

Senior Software Engineer with 13 years experience

Expertise in application architecture, systems integration, and cloud modernization

Technical Expertise

Tools & Languages: Java, C#, JavaScript, TypeScript, Node.js, React, Angular, R, Shiny, SQL, PostgreSQL, AWS, Docker, Kafka, Git, Terraform, Jenkin

Skills: Web apps, microservices, REST APIs, UI/UX, ETL/data processing pipelines, data visualization, software architecture, CI/CD, Agile, TDD, pair programming, mentoring, AI/LLM integration

Career Summary

Independent Development

Mar 2026 - Present

- Created Solace: an Agentic Development Environment and Semantic Symbol Store
 - Integrated Human-directed AI agents into every stage of software development
 - Built sandbox and safety rails to prevent agents from going out of scope
 - Established user-defined provisioning of agents and their roles & skills
 - Symbol store reduces task completion time by 15% and cost by 35%

Reinsurance Group of America (Contract via Dexian)

Mar 2024 - Mar 2026

Senior Software Engineer

Remote

- Architected cloud-based data pipeline enabling secure delivery from data producers to consumers, reducing errors, security concerns and time attributed to manually moving files
- Implemented multi-region application deployment in existing applications
 - Used Agentic AI in workflow to apply CI/CD changes rapidly in 100+ repos across teams
- Strengthened application security through vulnerability remediation
 - Reduced hundreds of vulnerabilities to zero across several supported applications
- Retired legacy systems - reducing operational overhead and attack surface
- Primary tech stack in this role: JS/TS, Node.js, React, C#, AWS, Terraform, Jenkins

World Wide Technology

Sept 2019 - Feb 2024

Senior Software Engineer & Technical Lead

St. Louis, Missouri

- Served as a consultant integrated with enterprise clients, leading architecture, modernization, and cloud migration initiatives across multiple engagements
- Modernized legacy monolithic app to scalable microservices and cloud-native distributed systems
 - Analyzed & replaced data flows in existing systems
 - Rewrote existing Java SpringBatch jobs as Node.js for AWS Lambda & Step Functions
 - Extracted Java microservices, raised test coverage above 90%, and refactored legacy backend
 - Converted Hibernate queries into performance-optimized PostgreSQL and Oracle SQL
 - Outcome: accelerated data delivery and app deployment, while reducing hosting costs and future development effort
- Technical Lead for multiple systems of a distributed, real-time, event-driven streaming platform
 - Led architecture & development of chat, chat moderation, and notification delivery systems

- Collaborated with Product Owners and peer Tech Leads to plan & deliver features
- Mentored and supported backend engineers across the team
- Tech Stack: Docker, Kotlin, Kafka, KStreams, PostgreSQL, Redis, React, Node, NestJS, TypeScript
- Enhanced full-stack reconnaissance & communication applications
 - Delivered features including: interactive map, chat, inventory tracking
 - Implemented CI pipeline instrumentation in Jenkins (Groovy) to capture and analyze test execution behavior, enabling identification and remediation of flaky tests across build runs
 - Tech Stack: Java, TypeScript, Angular, Node, Electron, message queues

CARFAX, Inc

Oct 2014 - Aug 2019

Software Developer

Columbia, Missouri

- Developed large scale, low latency, high availability, RESTful Java web services in cloud
- Supported Spring Batch app processing millions of records per day; writes to Cassandra + Solr
- Created dashboards with R + Shiny to detect data errors and performance regression
- Provided R training sessions to coworkers

FlightSafety International

June 2013 - Oct 2014

Software Engineer

Hazelwood, Missouri

- Shadowed graphics artists from the 3D modeling department to identify tasks for improvement and automation; developed and maintained appropriate software solutions
- Utilized software engineering life cycle: requirements gathering, wireframing and prototyping, implementation, testing, deployment, documentation, and maintenance
- Developed plugins (using C++ and C#) for third-party apps including Photoshop and 3ds Max

Other Works

Velocity DataTech (part-time independent venture)

Lead Software Engineer

Remote

- Determined tech stack, architecture, deployment pipeline, and infrastructure for startup
- Owned all software development, authentication, and deployment of customer-facing applications
- Created pipeline and application that provided on-demand dynamic lien reports for banks, some exceeding 1000 pages, reducing human labor from dozens of hours to less than a minute
- Utilized R, Shiny, Docker, Docker Hub, EC2, ALB, S3, Auth0, AWS, IAM, VPC, load balancing

Education & Certifications

AWS Certified Cloud Practitioner

Active through Jan 2027

Blackburn College

Aug 2009 - May 2013

Bachelor's degree in Computer Science, Mathematics with minor in Economics

Carlinville, Illinois

Graduated "Summa Cum Laude" with departmental honors