

Aric Camarata

Principal Software Engineer

Fairfax, VA (Remote) | aric.camarata@gmail.com | github.com/acamarata | linkedin.com/in/ariccamarata

PROFESSIONAL SUMMARY

Principal software engineer with 20 years building production systems in TypeScript, Node, Go, and React. Deep experience with GraphQL and Hasura, multi-tenant platforms, distributed event-driven systems, and the open-source packages I maintain on npm.

I have delivered principal-level work for Apple, AT&T, U.S. Treasury, Credit Karma, Walmart Labs, and Cigna, and architected platforms that serve many tenants from a single codebase with strict data isolation.

CORE COMPETENCIES

TypeScript, Node.js, React, Next.js, GraphQL, Hasura, PostgreSQL, Distributed Systems, API Design, System Architecture, Go, Docker, AI/ML, LLM, RAG, Retrieval-Augmented Generation, Embeddings, Vector Database, pgvector, tsvector, Reciprocal Rank Fusion, Cross-Encoder Reranking, Multi-Model Routing, Agent Orchestration, Claude API, OpenAI API, MLX-LM, Qwen3, Hugging Face, MCP, Prompt Engineering, Fine-tuning, Rust, Python, PHP, RAG pipelines, BGE-M3 reranking, RRF fusion, Ollama, Gemini API, Redis, Elasticsearch, Hadoop, HBase, Cassandra, Hasura Federation, REST, gRPC, Nginx, Hetzner VPS, Vercel, Cloudflare, Linux, Next.js (App Router), Tailwind CSS

PROFESSIONAL EXPERIENCE

Principal AI Engineer — Unity

Jan 2024 — Present

Fairfax, VA (Remote)

- Built backend services in Go and TypeScript for an AI platform: federated GraphQL via Hasura Remote Schema, PostgreSQL with pgvector, Redis Streams, and MinIO.
- Open-sourced nSelf CLI (Go) — single-command self-hosted backend stack (PostgreSQL, Hasura, Auth, MinIO, Redis, Nginx).

Principal Software Architect — Unity

Jan 2014 — Jan 2024

Remote

- Architected Unity Sites, a multi-tenant Next.js (App Router) platform serving multiple brands from one TypeScript codebase, with hostname-based middleware, Hasura row-level security, and JWT custom claims enforcing zero cross-tenant data leakage at the schema level.
- Designed distributed event-driven systems on AWS Lambda, DynamoDB, GraphQL Federation, Kafka, and SNS/SQS for financial services and healthcare clients.
- Delivered principal-level TypeScript and Node engineering for Credit Karma, Walmart Labs, Cigna, Cambium, Progress, and CMD.
- Built and published a portfolio of open-source TypeScript packages (dual CJS+ESM, strict types, full test coverage) used in production by other developers.

Senior Developer — United States Institute of Peace

Apr 2013 — Dec 2013

Washington, DC

- Developed and hardened web applications in C# / .NET / ASP.NET for a federal peace-building institution.
- Led application security hardening — defense-in-depth access controls, credential-stuffing mitigation, and secure session management aligned to federal security standards.
- Delivered full SDLC on compressed government timelines in a zero-tolerance security environment.

Senior Developer — Double Prime

Feb 2013 — Apr 2013

Remote

- Built API-first, headless content architecture using decoupled Drupal — an early implementation of platform patterns that have since become industry standard for high-scale editorial systems.

- Integrated Akamai CDN and Alfresco content management into high-traffic global editorial platforms; developed Perl-based data transformation pipelines for large-volume content migration.

Lead Developer / Architect — Northrop Grumman

Jul 2011 — Feb 2013

McLean, VA

- Led development on the U.S. Treasury GSOC — national-scale cybersecurity observability platform for the Department of the Treasury. Held active TS clearance (since expired).
- Architected real-time big data pipeline: Hadoop, Hive, HBase, and Cassandra under 24/7 multi-site disaster recovery SLA — large-scale data engineering infrastructure that forms the conceptual foundation of modern ML pipelines.
- Led a team of 6+ engineers through full SDLC; introduced DevOps practices (Git, TDD, CI/CD environments) and reduced deployment cycles at national security scale.

Senior Developer — College Board

Apr 2011 — Jul 2011

Reston, VA

- Delivered front-end and application development on the Big Future college search platform (tier-1 national traffic).
- Built feature components on Spring MVC + GWT stack with JSP/JSTL templating.

Senior Developer — Able Engineering

Jan 2011 — Apr 2011

Phoenix, AZ

- Built employee evaluation platform on Spring MVC — form workflows, scoring logic, and admin reporting.
- Delivered full feature set from requirements to deployment on compressed timeline.

Senior Developer — Capgemini

Oct 2010 — Jan 2011

Phoenix, AZ

- Built internal IT management tools on Zend Framework: ticketing system, helpdesk portal, system monitoring dashboard, and on-call rotation tool.
- Worked alongside enterprise consulting team serving large telecom and insurance clients.

Senior Developer — Pearson Education

Jul 2010 — Oct 2010

Chandler, AZ

- Delivered CMS integrations (Drupal, WordPress, Joomla, Mura) for educational publishing platforms.
- Built Genesys/Avaya call-center tooling for customer support operations.

Software Developer — Apple Inc.

Oct 2007 — Jul 2010

Chandler, AZ

- Built and maintained internal enterprise portal and knowledge base systems on Drupal and the LAMP stack, serving engineering and support teams across Apple divisions.
- Developed tools used daily by thousands of internal users — built to the reliability and maintainability standards of Apple's internal engineering culture.

Software Developer — AT&T

Apr 2006 — Oct 2007

Phoenix, AZ

- Led consolidation of call center support tooling as part of the AT&T / SBC AFSS merger initiative — unified NOC, Engineering, and Customer Support teams onto a single AJAX-based platform.
- Early experience with large-scale systems integration, observability tooling, and reliability engineering in a 24/7 enterprise telecom environment.

Manager — Roxbury Group

Feb 2004 — Mar 2006

Fairfax, VA

- Combined branch management and software development for a regional IT services firm — technical leadership alongside operational responsibility from the start of my career.
- Deployed and administered Windows Server networks for SMB clients; built custom inventory tracking and rental management software (C, TCL, PHP) that replaced manual processes and reduced reconciliation time significantly.

19D Cavalry Scout — U.S. Army

Mar 2001 — Feb 2004

Virginia

- Served as 19D Combat Cavalry Scout, U.S. Army.
- Service period included September 11, 2001 and the early post-9/11 operational period.
- Foundational experience in mission-critical decision-making, operational discipline, and leading under pressure.

EDUCATION

Bachelor of Science, Management Information Systems — Belltown University

Jan 2008 — Dec 2011

PA

Full Curriculum — 10 Certifications

freeCodeCamp

Computer Science & Mathematics — Full Library

MIT OpenCourseWare