# Kris Christopher

Forward Deployed Engineer | DevSecOps Engineer | Platform Engineer | Solutions Architect

Isabela, Puerto Rico | Remote (US) | 787-631-6775 | kris@kriscodes2.com | kriscode.com | linkedin.com/in/krischristopher | github.com/kriscodes2

Also: Senior Full-Stack Developer | Cloud | AI Systems | 12+ years | Team and platform leadership | Open to full-time & contract roles

## SUMMARY

Engineer with 12+ years of production experience across aerospace, SaaS, IoT, cloud platforms, and AI-enabled products. Builds secure CI/CD pipelines, internal developer platforms, and cloud delivery systems, plus the full-stack applications that run on them - from application interfaces and APIs to cloud infrastructure, security gates, software supply chain controls, and automated verification. Delivered full-stack systems for safety-critical aerospace programs and independently built and operated production products including Finca Metrics and SiftVid. Currently developing Koinessa, a local-first platform for coordinating AI coding agents with shared memory, explicit authorization, and evidence-based software verification.

## SKILLS

**DevSecOps & CI/CD:** GitLab CI/CD, reusable pipeline templates and CI/CD Catalog components, quality gates, release and deployment automation, manual approval gates, commitlint

**Software Supply Chain Security:** SBOM generation (Syft), SLSA provenance, in-toto attestation, artifact signing (Cosign), SAST (Semgrep, Coverity), software composition analysis, container image scanning (Trivy, Grype), secret scanning (Gitleaks), license compliance

**Platform & Infrastructure:** Kubernetes (k3s), Helm charts, container image builds with kaniko and buildah, self-hosted container registry, Artifactory and JFrog Xray, GitOps, Prometheus, Grafana, OpenTelemetry, DORA metrics

**Compliance & Assurance:** DO-178C, DO-330, control-matrix generation, HIPAA evidence packs, audit traceability, policy as code, zero-trust design aligned with NIST SP 800-207

**AI & Agentic Systems:** Multi-agent orchestration, Model Context Protocol (MCP), LLM routing, hybrid retrieval, context engineering, agent evaluation, human-in-the-loop approval

**Languages:** TypeScript, JavaScript, Python, Bash, SQL

**Frontend:** React, Next.js, Angular, CSS, Playwright

**Backend & APIs:** Node.js, Express, REST APIs, WebSockets

**Cloud & Delivery:** AWS (Amplify | DynamoDB | Lambda | CloudWatch | IoT Core), CloudFormation, GitLab CI, Docker

**Security & Verification:** Zero-trust design, policy-as-code, prompt-injection defenses, SAST, dependency scanning, secrets detection, SBOM and artifact traceability, vulnerability management

**Testing:** Vitest, Stryker mutation testing, Playwright end-to-end testing, automated CI verification, 28,676 tests | 0 failed (58-day receipt)

**Data & Search:** DuckDB, Neo4j, Elasticsearch, Redis

## EXPERIENCE

### Founder & Principal Engineer

KrisCodes2 LLC | 2021 - Present | Isabela, Puerto Rico (remote)

- Built and operate 12 production applications end-to-end on AWS, including Finca Metrics, SiftVid, and other customer- and business-facing products; take projects from problem discovery and architecture through implementation, testing, deployment, and operation.
- Designed and built a reusable, multi-language CI/CD component library (Node.js, Java, Python, Go, Rust, C, C++, Ada) with independently toggleable security gates - Trivy vulnerability, secret and license scanning, Semgrep SAST, Syft SBOM generation, Cosign artifact signing, JFrog Xray artifact scanning, mutation testing, control-matrix generation and HIPAA evidence packs - each able to run advisory or as a hard gate.
- Architected Koinessa, a local-first, evidence-gated AI software-delivery platform combining multi-agent coordination, a DuckDB shared brain with a 17,900+ symbol index, and an independent verification engine with 69+ CI jobs.
- Implemented zero-trust identity and authorization controls aligned with NIST SP 800-207 principles, including explicit access gates and policy evaluated from versioned code rather than prompt text.
- Designed prompt-injection defenses that assign retrieved documents and tool results explicit authority classes, preventing untrusted content from being treated as instructions.
- Built coordination across six AI coding-agent harnesses, including session identity, heartbeats, file claims, work leases with fencing tokens, durable messaging, checkpoints, and handoffs.

- Recorded a public 58-day engineering build receipt: 923,717 lines of code, 2,009 commits, and 28,676 passing tests with zero failures. These figures describe the documented build period, not a standalone measure of product quality.

### Senior DevSecOps Consultant | Tiger Team Lead

Collins Aerospace | March 2024 - April 2026 | Remote

- Led an eight-engineer tiger team modernizing CI/CD infrastructure for Black Hawk avionics software under DO-178C and DO-330 compliance frameworks.
- Delivered $3 million in tooling cost savings by replacing commercial licenses with open-source equivalents; an additional $8 million in savings was reported as on track.
- Integrated Coverity, Polyspace, and VectorCAST security and quality gates across pipeline stages, with vulnerability policies enforced at commit time.
- Established DevSecOps practices across four scrum teams, including static application security testing, dependency scanning, secrets detection, and compliant artifact traceability.

### Full Stack Engineer, Aeronautics Division

Lockheed Martin | March 2022 - February 2024 | Remote

- Consolidated 190 avionics applications into a unified interface giving users real-time readiness visibility across F-16, F-22, F-35, and C-130J programs.
- Built WISDOM using Angular, Neo4j, and Elasticsearch; intelligent parts matching and supply-chain optimization reduced F-35 parts costs by 17%.
- Introduced the Aeronautics division's first Redis caching implementation to improve readiness-dashboard response times.
- Delivered workflow automation and system-consolidation improvements contributing to $8 million in program-office savings.

### Founder

Grow-Nanny | 2018 - 2021 | Remote

- Built an IoT product from prototype to production, independently developing firmware, AWS cloud backend, and mobile dashboard.
- Designed AWS IoT Core architecture for wireless solar VPD sensors monitoring plant-growth environments.
- Ran a global beta program with growers across multiple continents, with zero reported security incidents during the program.
- Applied encryption at rest and in transit, role-based access controls, and audit logging to the consumer IoT product from the outset.

## EDUCATION & CERTIFICATIONS

**Associate of Applied Science (AAS), Fire Science Technology**

Glendale Community College | Graduated with Honors | GPA 3.84 | President of Student Government | 106 credits toward a bachelor's degree

**BS Electronics Engineering Technology**

DeVry University of Technology | Graduated 2003

**A Cloud Guru, Udemy, Sundog Education, Coding with Mosh**

50+ Online Certifications & Courses | Covering AWS, React, TypeScript, DevOps, and AI/ML