

Matthew Cochran

Staff Software Engineer | AI Systems and Developer Tools
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Professional Summary

Hands-on software architect with Staff Engineer experience in AI agent workflows, developer tools, and distributed services. Currently develops coding-task delegation and browser-verification tools used across personal projects. Professional work includes Rust/React product development, MCP automation, and hands-on CTO leadership. Seeking a full-time individual-contributor role.

Technical Skills

AI and developer tools: LLM integration, agent workflows, MCP servers, tool permissions, human approval controls, deterministic verification, Playwright, CLI development
Development: TypeScript, Rust, Go, Python, C#, React; APIs, distributed systems, Git worktrees, CI/CD
Cloud and data: AWS, Azure, Google Cloud (GCP), Kubernetes, Terraform, PostgreSQL, MongoDB, Datadog

Selected Open Source Projects

Junior Agent | AI Coding Task Delegation junioragent.dev | github.com/matt-cochran/junior

- Developed a CLI for delegating scoped coding tasks to lower-cost models using explicit acceptance criteria, isolated Git worktrees, independent checks, and bounded repair attempts.
- Created reviewable handoffs containing changes, check results, model usage, and unresolved work, with manager review before acceptance.
- Integrated Praxec MCP/CLI tooling for critical-path planning, House of Quality analysis, and failure-mode assessment into task planning and review workflows.

Jevitate | Autonomous Browser Testing jevitte.com | github.com/matt-cochran/jevitte

- Developed a TypeScript CLI and Model Context Protocol (MCP) server for browser exploration, reproducible defect capture, regression testing, and replay-based fix verification.
- Separated model-directed exploration from deterministic checks of browser evidence; added CI reporting, authorized-origin controls, and execution limits.

Both tools recently open-sourced and actively used across my own projects.

Professional Experience

MC Product Labs | Product Development September 2026 - Present

- Developing software tools and preparing selected commercial products for production release.

OutboundLabs | Technical Co-Founder 2024 - Present

Side project alongside employment through January 2026; transitioned to full-time work after Distributed Spectrum.

- Designed and developed an agentic CRM initiative spanning outreach, customer workflows, and support using Rust, C#, TypeScript, and React.
- Designed licensing, distributed-workflow, and AI development capabilities for internal testing.

Distributed Spectrum | Staff Engineer, Full Stack May 2025 - January 2026

- Led SensorHQ re-architecture in Rust and React for AI-enhanced radio-spectrum analysis, integrating active learning and embedded Jupyter capabilities.
- Reduced model training time from five hours to five minutes through active-learning integration.
- Built an MCP pipeline generating cross-framework UI components from Figma; mentored engineers in Rust and component architecture.

Professional Experience Continued

Qrypt | Staff Software Engineer, Scalability

April 2023 - January 2025

- Designed and implemented architecture for quantum-secure encryption services using Azure, Rust, Go, Kubernetes, and Terraform.
- Reduced cloud costs by 80% using KEDA-based dynamic scaling, spot instances, and serverless infrastructure.
- Migrated high-load Python services to Rust and Go, using Dapr microservice architecture to improve compute efficiency.
- Automated delivery pipelines and redesigned disaster recovery, achieving full system recovery in under four hours.

TruthShield | Founder and CTO

January 2022 - April 2023

- Developed a SaaS engineering acceleration framework and AI-driven engineering analytics using GCP, C#, React, Python, Kubernetes, and PostgreSQL.

artnet | Chief Technology Officer

March 2018 - February 2022

- Owned modernization of a decades-old monolithic platform, actively designing, planning, managing, and helping execute the transition toward cloud architecture.
- Led engineering collaboration with MediaAgility on a phased on-premises migration to GCP, separating infrastructure migration from broader application modernization.
- Used GCP, AWS, C#, Python, Kubernetes, and Terraform; reduced infrastructure costs by more than \$2 million annually through optimization and vendor management.
- Introduced CI/CD and deployment automation, reducing deployment times from weeks to minutes.

External evidence: Persistent / MediaAgility artnet cloud-migration case study

artnet | Chief Architect and SVP Engineering

March 2017 - March 2018

- Redesigned legacy architecture with event-driven microservices and containerization; led improvements to deployment automation.

Medidata Solutions | Senior Manager, Software Development

December 2013 - February 2017

- Architected enterprise cloud software and led engineering teams using AWS, Python, C#, SQL Server, and CI/CD; improved performance, reducing latency by 45%.

Earlier Experience

Shutterstock | Manager, Software Development | 2012 - 2013

Vertical Capital Investment Advisors | Systems Architect / Technical Lead | 2011 - 2012