

Richard Trinh

Olathe, Kansas | (816) 288-7470 | richardtrinh452@gmail.com | linkedin.com/in/rtrin | github.com/rtrin

Education

Colby College – B.A. in Computer Science, GPA: 3.66

December 2026

Skills

Languages: C#, Go, Java, Python, C, C++, JavaScript, HTML, CSS, SQL, Bash

Frameworks/Databases: .NET, Spring Boot, React, Angular, Node.js, PostgreSQL, Redis

Other: Azure, AWS, Terraform, Docker, Kubernetes, Linux/Unix, Git, gRPC, Distributed Systems

Experience

Software Engineer Intern, HashiCorp – San Francisco, CA

June 2025 – Aug 2025

- Designed HTTP load tests for Boundary APIs using Go and Vegeta, identifying bottlenecks in oplog queries causing 5x slower P99 query latency in customer clusters (e.g., Takeda, Roblox)
- Implemented a rate limiter in the Boundary controller and validated improvements via Terraform load tests
- Created Grafana/Datadog dashboards to visualize oplog load, query activity/latency, and execution times
- Fixed Boundary CLI issue where multiple connections on the same port caused freezes by adding error handling and e2e tests, improving stability for 10k+ monthly users
- Refactored the audit pipeline in Boundary's cloud services with Go, ensuring processing of 100k+ events/hour

Software Engineer Intern, Garmin – Yarmouth, ME

Sept 2024 – Dec 2024

- Developed gRPC endpoints and protobufs for multiple .NET microservices to reverse balances on accounts 7+ days past due, reducing annual collection agency fees by \$120k
- Designed a Redis cache layer for account statuses to reduce API latency by 30% and serve 1k+ requests daily
- Created Terraform provider endpoints in Go, enabling 10+ billing configuration infrastructure scripts
- Wrote SQL revision scripts to fix subscription activation, resulting in 500+ re-processed customer payments
- Implemented polling for pending payments on overdue accounts in C#, reducing rate of false agency tasks
- Refactored error handling for RabbitMQ service to improve message queue throughput

Software Engineer Intern, Netsmart – Overland Park, KS

June 2024 – Aug 2024

- Designed a document history tracking tool using TypeScript, Angular, Java, and Spring Boot, streamlining support processes and reducing JIRA ticket volume across 5+ engineering teams
- Optimized search queries for multiple Java backend endpoints, reducing app loading times by 38%

Projects

Arcaea Charts – TypeScript, React, PostgreSQL

github.com/rtrin/arcaeacharts

- Web app for browsing and filtering Arcaea rhythm game charts with integrated YouTube chart previews

Reef Annotator – Python, OpenCV, TensorFlow, Keras

github.com/rtrin/atoll-segmentation

- U-NET Computer vision model used to segment 1,500+ reef island images for climate change research

Gesture Controller – Arduino, C++, Unity, C#

- Device for controlling movement and rotation of objects in 3D virtual space (similar to Zelda BoTW puzzles)

Awards/Extracurriculars

Colby Robotics

Co-President

Colby Hackathon Club, Mountaineering Club, Hiking Club, Skiing Club

Member

Dataiku Data Hackathon

1st Place in ML Modeling