

Connor McKelvey

Senior Software Engineer

Boulder, CO

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An experienced full-stack Software Engineer with a 10-year background in Cloud architecture, distributed systems, and web development. Specializes in orchestrating software projects and crafting complex systems across a broad spectrum of technologies, with a keen emphasis on elevating developer experience and tooling efficiency. Brings exceptional mentorship skills, a dedication to innovation, and a commitment to continuous improvement within dynamic environments.

Work Experience

Staff Engineer 1

VMware Carbon Black — Boulder, CO / Remote

April 2019 - April 2024

- Elevated junior engineers' proficiency in Go, AWS, Kubernetes, via pair programming and workshops, enhancing the team's delivery of reliable software.
- Accelerated onboarding of 8 engineers with pair programming and architecture overviews, leading to significant new feature deliveries and a distributed on-call model.
- Developed and contributed a lease-based load-balancing solution in Golang for an open-source stream processing library, reducing latency spikes by 83%.
- Implemented a scalable event filtering solution in Go, Python, and Java, boosting filtration capabilities and enabling a 30% cost savings for customer data storage and processing.
- Architected and developed a schema versioning system for streaming data in Go, enabling customizable updates and lifecycle management while eliminating 10,000+ lines of code.
- Developed a Flink utility in Java enabling arbitrary data extraction from protobuf messages without full deserialization, cutting processing time in half.
- Created configuration validation, development, and issue identification tooling in Python and Go for a self-service public API Gateway, reducing MTTD from 1 hour to 5 minutes.
- Developed a data processing pipeline with Docker, Go, Python, and Jupyter to identify and report unused observability metrics, reducing operational costs and platform issues.

Software Engineer III

Workday — Boulder, CO

November 2018 - April 2019

- Successfully integrated a modern React application with an existing MVP shell, enhancing accessibility and avoiding code duplication.
- Created Typescript tooling for type-safe configuration loaders, reducing boilerplate across multiple environments and test suites.
- Streamlined development and testing setup by automating reservation, bootstrapping, and local tunneling for ephemeral development environments.
- Led Scrum ceremonies and mentored team members in Node.JS, Typescript, gRPC, and software engineering best practices, enhancing team efficiency and skill set.

Software Engineer

CA Technologies — Boulder, CO

May 2016 - November 2018

- Conducted technical workshops and managed onboarding for three teams, improving associate engineers' skills and productivity, and promoting a culture of collaboration.
- Developed an Event Gateway service with OpenResty and Lua, facilitating efficient edge-based authentication and lightweight data transformations.
- Minimized Docker image vulnerabilities through the establishment of a base image library and the implementation of a scheduled building and vulnerability scanning pipeline.
- Implemented a backup and restore solution for Grafana dashboards, transitioning to Infrastructure as Code, enhancing data loss prevention and improving observability for monitoring and incident response.

- Implemented a sandboxing functionality in React, TypeScript, and Node.js for secure browser rendering of untrusted HTML, enhancing threat mitigation.

Web Developer

Findsome & Winmore — Orlando, FL

June 2014 - May 2016

- Collaborated with development and leadership to plan, estimate, and execute web development projects, ensuring alignment with client objectives, budget, and deadlines.
- Directed the architecture and development of business solutions using Node.js, Angular, and Ruby on Rails, encompassing faceted search, interactive maps, and bespoke web applications.
- Implemented automated marketing analytics and web traffic reports, providing clients with valuable insights for decision-making.
- Established a physical device lab for concurrent QA testing, improving the quality and compatibility of web solutions across devices.

Education

B.A. Sociology

University of Central Florida — Orlando, FL

August 2010 - December 2013

- Minor in Cultural Anthropology, Certificate in Women's Studies
- Active in Amnesty International and Knight's Advocates
- Volunteered with UCF Victims Services and Harbor House of Central Florida

Course Certificate: Algorithms for Searching, Sorting, and Indexing

University of Colorado Boulder — Boulder, CO

December 2024 - January 2025

Course Certificate: Trees and Graphs: Basics

University of Colorado Boulder — Boulder, CO

January 2025 - January 2025

Skills

Programming Languages: Go, JavaScript, TypeScript, Python, Java

Frameworks and Technologies: Cloudflare Workers, Kubernetes, Docker, AWS Kinesis, Kafka, Flink, Jupyter, OpenResty, Node.js, Angular, React, Prometheus, Grafana

Databases and Stores: Postgres, SQLite, AWS DynamoDB, AWS S3, BadgerDB, Cloudflare KV, ElasticSearch

Software Development: API design, Secure software development, software architecture, distributed systems, event-driven applications, web standards, test automation, code generation

Infrastructure, Security, and DevOps: Workload orchestration, infrastructure as code, CI/CD, observability and monitoring, incident management, vulnerability auditing, threat modeling

Problem-Solving: Applies first principles thinking and strong analytical skills to deconstruct and understand the fundamental elements of complex technical challenges.

Projects

Résumé: Markdown syntax and renderer extensions to support compiling JSON and Markdown template files into HTML, Docx, and PDF Résumé documents for release. Built with Golang.

Tmplrun: Extensible templating engine library and CLI tool providing a language-independent text templating API with out-of-the-box JavaScript support. Written in Golang.

Dottie: Constraint-based appointment scheduling and planning tool for the behavioral health industry. Built with Python, OR Tools, Node.js, Typescript React/Remix, Postgres