

Founding engineer building tools that professionals rely on.

Summary

Engineer with a degree in applied physics. Fifteen years designing and building developer tools, static analysis programs, general automation, frontend platforms, most recently as one of the first engineers at Moderne.

Education

California State University, Chico
B.S. Physics, Applied Physics
Minor in Mathematics
2010

Certifications

OpenRewrite Advanced Recipe Development
Moderne · 2024

Data Science Specialization
Coursera · 2015

Process Mining: Data Science in Action
Coursera · 2015

Publications

Simultaneous Tracking of Multiple Points Using a Wiimote
The Physics Teacher · Nov 2012
Vol. 50, Issue 8, p. 482

Pastimes

- Enjoying life with my wife and son
- Music: piano and guitar
- Photography
- Audiobooks
- Video games
- Fly tying and fishing
- Calligraphy and fountain pen restoration
- Tinkering and building cool things
- Whatever my son is into this month

Experience

Moderne / Staff Software Engineer / 2021 – Present

One of the first engineers at a startup reinventing how enterprises maintain, secure, and automatically refactor applications. Architected the frontend, infrastructure, and developer tooling, and contributed to every major feature and milestone. Some notable examples include:

- Built the OpenRewrite Recipe Builder, an environment for composing, editing, and visualizing recipes, some composed of thousands of others. React, zustand, three.js, ngraph.
- Shipped code visualizations in-browser and via microservice, generating analysis from Jupyter notebooks and recipe-run data tables for codebases at enterprise scale.
- Authored base recipes running eslint, prettier, and jscodeshift across large codebases; built a generator producing 900+ net-new recipes.
- Automated tenant creation, service deployment, repave maintenance, and tenant deletion with Terraform and Spinnaker.

Build.com / Senior Software Engineer, Web Platform / 2017 – 2021

Built the web platform Build.com and Ferguson teams used to ship high-performance isomorphic e-commerce apps, with React, GraphQL, built-in telemetry, and an in-house scaffolding CLI.

- Grew the platform to serve over 50% of Build.com traffic, improving nearly every performance and business metric it touched.
- Cut delivered CSS by over 33% with AST-based pruning and a csstats-driven refactor, then defined a utility-CSS migration path product teams could continue.
- Built an internal tool that parses source into ASTs to detect regular expressions vulnerable to ReDoS attacks.

FIS / Superion / Software Developer III / 2016 – 2017

Built an interactive style guide for Superion applications with code scaffolding, style guidelines, and Angular 2+ web components.

SunGard Public Sector / FIS / Technical Support Engineer II / 2014 – 2016

Escalated support for enterprise public-sector deployments; built internal tooling to improve support analysts' speed to resolution.

BDV (now Steris) / Product Design Engineer / 2012 – 2014

Prototyped a touch-less control system letting surgical staff change 8MP monitor layouts from inside the sterile field, demoed at AORN 2014. Managed retrofit and deployment of USB-X, an IP-based USB switching device.

Sample of Projects

Sidequest · An IDE for orchestrating multiple AI agents in parallel. zieka.github.io/get-sidequest

Bru · Native macOS package manager written in Zig. Single binary, zero dependencies, drop-in brew replacement. zieka.github.io/bru

Scopes · Cinematographer-grade histogram, waveform, and vectorscope overlays for web development. Chrome extension. zieka.github.io/scopes

Moderne Recipe Builder · Visual environment for composing and visualizing refactoring recipes. app.moderne.io/builder

Patchwork Quest · SpriteKit iOS game that stitches photos of hand-drawn maps into a navigable world. apps.apple.com/app/patchwork-quest/id6749873232

GraphQL Reshape · CLI for large semantic changes to GraphQL schemas. github.com/zieka/graphql-reshape

More projects at zieka.github.io/projects