**Andy K. Barrows**

Frontend Lead with a DevOps / security background. B.S. in Informatics and Cybersecurity from U. of Washington.

## <https://github.com/rckeller> [https://barrfitz.com](https://barrfitz.com/) [andy@barrfitz.com](mailto:andy@barrfitz.com)

Professional Experience

Certara

## Engineering Lead, Certara A.I. 2023

* Lead engineer for Certara A.I, a SaaS that generates medical research by leveraging LLMs (GPTs) trained against scientific literature & clinical data.

Technologies: Typescript, React, Python, SciKit. Llama, Falcon, NeoXT

Shopify

## Senior Software Engineer 2021 – 2023

* Frontend lead for Linkpop, a new link-in-bio tool that uses stateless server-side components and Hydrogen to render pages near-instantaneously.

Technologies: Typescript, React, GraphQL, Webpack, Cypress, Buildkite

The Washington Post

## Frontend Lead 2020 – 2021

* Set and execute the technical direction of frontend work related to customer retention, special offers, content relevance, and personalization.

Technologies: Typescript, React, Redux, Webpack, Cypress, Jenkins

# **Clevertech**

## Senior Software Engineer, Fullstack 2019 – 2020

* Developed award-winning cross-platform SaaS products for startups and Fortune 500 clients in the transport logistics industry.

Technologies: Node, React, Redux, Webpack, Cypress, Docker, CircleCI

# **Crossover Health**

## Software Engineer II, Frontend 2018 – 2019

* Lead the frontend engineering team, developed core architecture, build infrastructure and UI libraries for multiple new cross-platform applications.

Technologies: TypeScript, React, Webpack, Cypress, Docker, CircleCI

# **Capital One**

## Software Engineering Intern 2018

* Led a project team of 6 developers – providing 1:1 mentorship, system designs, and defining and implementing application architecture.

Technologies: Go, Node, React, Webpack, Rollup, MongoDB, AWS

# **T-Mobile**

## Security Engineering Co-Op 2017 – 2018

* Developed full stack applications and data ingestion systems for cyber threat intelligence, automating the collection of emerging threat data.

Technologies: Puppet, Ansible, Ruby, Bash, JavaScript, Node, React

# **University of Washington**

## Software Engineer, Web 2017 – 2018

* Developed a bespoke IT project management web app used to select and grant $12 million in funding to over 100 campus projects annually.

Technologies: Node, React, Redux, Webpack, MySQL, MongoDB, AWS

Education

University of Washington

## Bachelor of Science in Informatics and Cybersecurity

Graduated March 2019; 3.7 GPA

Code Fellows, Seattle

## Advanced Web Development

Completed January 2017

Skills

## Front-End Development

JavaScript ES12, TypeScript, React, Redux, MobX, GraphQL, Liquid, D3.js

## Back-End Development

Golang, Ruby, NodeJS, Express, Koa, Feathers, Restify, Adonis, Micro

## Build Infrastructure / Tooling

Babel, Webpack, Rollup, Vite, Turbo

## Testing & Quality Assurance

Jest, Cypress, Playwright, Mocha, Chai

## DevOps & CI/CD

Puppet, Ansible, Jenkins, Travis, CircleCI, Buildkite, Docker, AWS ECS

## Database Administration

MySQL Server, Postgres, MongoDB, Firestore, Redis, GraphQL & Apollo

## Penetration Testing

Burp, Nmap, Metasploit, Aircrack-ng

Open Source

*Most recent packages:*

## [@shopify/cypress-graphql](https://www.npmjs.com/package/@shopify/cypress-graphql)

[Test GraphQL endpoints w/ Cypress](https://rykeller.com/cypress-unfetch/).

## [circleci-runtime-optimizer](https://circleci.com/orbs/registry/orb/rckeller/runtime-optimizer)

[CI/CD optimization using git scm, docker caching, and more](https://rykeller.com/circleci-runtime-optimizer/).

## [cypress-react-unit-test](https://github.com/bahmutov/cypress-react-unit-test)

[Library for writing e2e and unit tests using the same integration test suite](https://rykeller.com/cypress-react-unit-test/).