# NICHOLAS RAY

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#### EXPERIENCE

### **Senior Software Engineer**

## Wikipedia (Wikimedia Foundation)

July 2018 – Present

- Helped develop Wikipedia's 2023 redesign that received over 10 billion monthly page views
- Decreased bugs and manual review time by building a visual regression tool used by multiple teams
- Won "Web Performance Hero" award for going above and beyond to improve web performance
- Reduced mobile site's total blocking time by ~300ms on low-end devices visiting long articles
- Accelerated decision-making by developing a tool to evaluate performance impact of potential features
- Improved number of searches started by 30% by helping develop a new typeahead search component
- Increased navigation to different sections by 50% by helping create a new table of contents with scroll state
- Decreased scrolling to top of page by 16% by helping implement a sticky header with editor tools
- Eliminated layout shifts that occurred when lazy loading/client-side rendering components
- Determined performance impact of features by writing comparative synthetic performance tests
- Minimized performance regressions of search component by implementing synthetic test telemetry to measure its rendering performance
- Optimized readability, accessibility, and performance of desktop site by developing a new limited-width layout
- Helped develop a take-home coding exercise used by multiple teams to evaluate software engineer candidates
- Onboarded new engineer and increased their productivity by meeting with them weekly for eight months and developing a "quick start" repo that empowered them to push to production on their third day
- Helped develop improved workflows for users trying to edit Wikipedia from their phone
- Skills and technologies: TypeScript, JavaScript, Jest, HTML, CSS, LESS, Docker, PHP, Node.js, Puppeteer, Vue.js

### **Software Engineer**

# **UpWell (formerly Alliance Health)**

**August 2014 – April 2018** 

- Saved over \$100,000 / year and improved stability of business-critical services by leading a migration process from Pivotal Cloud Foundry to AWS Elastic Container Service platform
- Expanded business capabilities by engineering a multithreaded shipment service with a REST API
- Improved stability and code quality of a React single-page application that utilized server-sent events
- Skills and technologies: React, JavaScript, HTML, CSS, Docker, PHP, Java, Ruby, Kotlin, Go, AWS, Git

### SOFTWARE PROJECTS

• <u>nray.dev</u> (2022). Developed a technical blog using TypeScript, React, Astro.js, and Tailwind CSS where I write about front-end development focused on web performance

## **E**DUCATION

### Eugene, OR

**University of Oregon** 

September 2012

- Bachelor of Science. GPA: 4.02
- Summa cum laude. Phi Beta Kappa

### **Languages and Technologies**

• JavaScript, React, TypeScript, Node.is, Jest, HTML, CSS, Git, Docker, SQL, Next.is, Astro.is, Tailwind CSS