# NICHOLAS RAY

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#### EXPERIENCE

#### **Senior Software Engineer**

## Wikipedia (Wikimedia Foundation)

July 2018 - Present

- Developed UI features for desktop and mobile sites that received over 20 billion views per month across 300 languages
- Reduced visual regressions and saved hours of manual review each week by building a visual regression tool
- Won "Web Performance Hero" award, given to individuals who have gone above and beyond to improve web performance
- Improved amount of searches started by 30% by developing a new typeahead search component
- Increased navigation to different sections by 50% by creating a new table of contents with scroll state
- Decreased scrolling to top of page by 16% by implementing a sticky header with frequently used editor tools
- Eliminated layout shifts that occurred when lazy loading/client-side rendering components
- Prevented 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
- Onboarded new engineer and increased their productivity by meeting with them weekly for 8 months and developing a "quick start" repo that empowered them to push to production on their third day
- 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

#### **S**OFTWARE **P**ROJECTS

- <u>nray.dev</u> (2022). Technical blog I developed using TypeScript, React, Astro.js, and Tailwind CSS where I write about web development, front-end development, and computer science concepts.
- <u>Front-end Performance Presentation</u> (2019). An interactive slideshow about front-end rendering performance I created using React and presented to my team at Wikipedia
- <u>Backpacking Blog</u> (2017) Developed a Node.js static site generator that parsed markdown and compiled it to HTML and PDF formats, resized images into a set of responsive images, and supported extendable shortcodes. Built an interactive component using JavaScript that showed each trip's route and elevation profile

#### **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.js, Jest, HTML, CSS, Git, Docker, SQL, Next.js, Astro.js