

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 for going above and beyond to improve web performance
- Improved the 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 eight 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

SOFTWARE PROJECTS

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

EDUCATION

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