Nicholas Welch

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SKILLS **Ruby, Rails, JavaScript, React.js, Redux, jQuery, HTML5, CSS3, SQL, Git, Webpack, TDD**

PROJECTS

Bop (Rails, PostgreSQL, React.js, Redux, React Player) | *Sole Developer*   live | github
A single-page Spotify clone that allows users to stream music, create playlists, and follow their friends and favorite artists.

- Combined Redux's global store and React Player's data management to maximize efficiency of dispatches and protect local state
- Utilized polymorphic associations and concerns in Rails to minimize database tables and to keep code modular
- Leveraged CSS3 transitions and custom React modals to maintain a responsive UI/UX

Moving On (JavaScript, CSS3, HTML) | *Sole Developer*   live | github
A minimalist side-scrolling platformer that encourages cooperation and intuitive thinking to solve puzzles.

- Designed custom state management architecture for unidirectional data flow, granting full control over object manipulation while preventing data collision
- Employed HTML Elements and standard DOM manipulation to separate styling and function and facilitate large-scale changes to game
- Integrated asynchronous functions and Promise logic to efficiently update animation frames only when useful

Project Phantom (React VR, React.js, npm, npx) | *Collaborator*   live | github
A developer's toolkit for streamlining the creation of applications in virtual reality.

- Created a Node.js component library module that facilitates the transition between React and React VR and dynamically handles 360° content visualization
- Published an npx package runner that creates a pre-configured React VR project and streamlines the setup process
- Developed a file processor that extracts elements from a static HTML page and renders them in a VR preview

EXPERIENCE

Language Instructor
Self-Employed   Oct 2015 - Feb 2018

- Designed and conducted 1000+ private ASL, English, and French lessons with a 99% approval rate from students
- Adapted lesson structure according to students' varied cultural and linguistic backgrounds

Technology Advisor and Webmaster
Penn Computing, University of Pennsylvania   Aug 2012 - Aug 2015

- Refactored and updated CSS and HTML code segments for the Penn Computing website
- Assisted staff and students in troubleshooting hardware and software, including network configuration, DHCP lease renewal, custom computer assembly, Remote Desktop Services, and antivirus security measures
- Co-managed the successful relocation of Van Pelt Library's website and reorganization of electronic catalog storage system

EDUCATION

Web Development - *App Academy (Spring 2018)*
Linguistics, B.A. - *University of Pennsylvania, 2016 (summa cum laude)*