

## PERSONAL INFO

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# Nicholas Welch

Software Developer

I build gorgeous, responsive apps that just work.

## SKILLS

### Backend

Ruby on Rails  
PostgreSQL  
MongoDB  
Express  
Firebase

### Frontend

JavaScript  
React  
React Native  
React VR/360  
Redux  
jQuery  
HTML5  
CSS3/SCSS

### Tools

REST APIs  
RSpec  
Jest  
Webpack  
Git  
JBuilder  
Heroku  
AWS  
npm  
Postman  
InVision  
Photoshop

## EDUCATION

### Web Development

App Academy, 2018

### Linguistics, B.A.

University of Pennsylvania,  
2016 (*summa cum laude*)

## PROJECTS

### Bop (Rails, PostgreSQL, React, Redux) | Sole Developer

[live](#) | [github](#)

*A single-page music-streaming app.*

- Integrated the React Player library with Redux's store for seamless audio streaming
- Decreased database tables by 25% by using polymorphic associations and concerns
- Rendered search results based on a weighted algorithm that prioritizes search relevance

### The Power of Friendship (JavaScript, HTML, CSS) | Sole Developer

[live](#) | [github](#)

*A minimalist side-scrolling puzzle platformer that encourages cooperation.*

- Implemented unidirectional data flow for predictable state and reliable DOM rendering
- Built physics engine to implement features such as flying, swimming, and new characters
- Parsed level tilemaps to avoid re-rendering of static elements and keep gameplay smooth

### Project Phantom (React VR, npm) | Collaborator in a team of 4

[live](#) | [github](#)

*A developer's toolkit for streamlining the creation of applications in virtual reality.*

- Created an npm component library that bypasses common issues of VR content rendering
- Published an npx package runner that generates a pre-configured React VR project
- Packaged a script that scrapes HTML and dynamically renders elements in a VR preview

### Quidproquo (in progress) (MongoDB, Express, React Native, Node.js, Firebase)

[github](#)

*A 'TaskRabbit-meets-Tinder' social meetup app centered around exchanging skills and favors.*

**Keywords:** Android, iOS, mobile, MERN, websockets, OAuth, location services

## EXPERIENCE

### Language Instructor | Self-Employed

Oct 2015 - Feb 2018

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

### Technology Advisor, Webmaster | 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, computer assembly, and antivirus security measures
- Co-managed the successful relocation of Van Pelt Library's website and reorganization of electronic catalog storage system