# **Derek Shue**

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**Skills** ES6 JavaScript, React.js, Redux.js, Ruby, Ruby on Rails, RSpec, Selenium, MongoDB, Express, Node.js, Python, SQL, Git, HTML5, CSS3, PostgreSQL, jQuery, JSON, GraphQL, Apollo, Docker, AWS S3

## **Experience**

App Academy

#### **Online Instructional Assistant**

September 2020 - Present

- Assist in development and bug fixes of internal tools that run on ROR/Javascript/React
- Teach students wide range of CS topics, including Python, Javascript, React, and Data Structures/Algorithms
- Develop CS projects and test specs used to aid with student learning
- Improve curriculum to stay up-to-date with current trends in popular technologies, frameworks, and best practices

#### **Property Matrix**

### Software Developer

June 2020 - August 2020

- Implemented user-requested features and functionality, such as updating the ROR backend to automate email notifications when a tenant invoice is missing and adding React.js components to allow user-created custom fields when sending a form to tenants
- Debugged and fixed user-reported issues, including ROR error handling, HTML/CSS styling, and AJAX form submission
- Wrote tests using Rspec and Selenium and updated the automated test suite to ensure software feature functionality

#### Lawrence Berkeley National Laboratory

Research Assistant

Summer 2018

- Investigated the limb-specific enhancer ZRS at Sonic hedgehog (Shh) gene in snakes through researching phenotypic robustness and ultraconserved enhancers
- Gathered DNA samples from 10-12 mice per week through euthanization and clipping
- Updated and organized transgenic mice data via Google Sheets

## Education

#### University of California, Berkeley

August 2016 - May 2019

Bachelor's in Cognitive Science - GPA: 3.7

Relevant Coursework: The Structure and Interpretation of Computer Programs, Computational Models of Cognition

App AcademySeptember 2019 - February 2020

Immersive software development course with focus on full stack web development

# **Projects**

Fakebook (JavaScript, React / Redux, Ruby / Rails, HTML5, CSS3, PostgreSQL)

<u>Live Site</u> | <u>Github</u>

- Facebook clone
  - Implemented eager loading to eliminate "N+1" queries and drastically improve loading times
  - Leveraged Redux single-state management to streamline communication between backend and frontend architecture

• Utilized polymorphic associations to reduce database calls and allow for a lighter weight, scalable application

• Incorporated stylistic features of Facebook using HTML / CSS, including color schemes, navbar layout, and button and text element styles

#### Pokemon Battle Simulator (JavaScript, HTML5 Canvas)

Live Site | Github

Two-player turn-based Pokemon battle game and single-page application

- Implemented movement animation using requestAnimationFrame to make the Pokemon come alive and create a more engaging game
- Integrated health, damage, and statistic calculations from the current Pokemon games through state changes that rely on Object-Oriented Programming techniques and conditional logic
- Incorporated continuous animation playback loop within framework of turn-based, state-shaped conditional logic