Derek Shue

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

Education

App Academy September 2019 - February 2020

Immersive software development course with focus on full stack web development

University of California, Berkeley

Bachelor's in Cognitive Science

GPA: 3.7

Projects

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

Live Site | Github

August 2016 - May 2019

Facebook clone

- Utilized polymorphic associations to reduce database calls and allow for a lighter weight, scalable application
- 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
- Incorporated stylistic features of Facebook using HTML / CSS, including color schemes, navbar layout, and button and text element styles

Pokemon Battle Simulator (in Progress) (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

MusicBox (JavaScript, GraphQL, React.js, Apollo, Node.js, MongoDB, AWS, Docker, HTML5, CSS) *Amazon-themed music store*

Live Site | Github

- Created custom mutation and query components to follow Object-Oriented Programming design and create and load object elements
- Harnessed MongoDB to handle large quantities of data and make the application scalable
- Implemented product upload from frontend to backend to store large picture files in AWS S3 bucket
- Utilized Git workflow in a team setting to cooperate efficiently and review team members' code

Experience

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 mice through euthanization and clipping
- Updated and organized transgenic mice data via Google Sheets

Tufts Medical Center

Research Assistant Summer 2015, 2016

- Conducted study to investigate correlative links between JAX mouse genes and Alzheimer's Precursor Protein (APP)
- Evaluated the effects of Drosophila melanogaster genes on the production of EAAT1, which is correlated with ALS
- Mentored student in standard laboratory procedures
- Analyzed laboratory data through qPCR readouts