

# Edward Zhou

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San Francisco, CA

[Portfolio](#)

[Linkedin](#)

[GitHub](#)

## Skills

React, Redux, JavaScript, Ruby on Rails, Express, Node.js, PostgreSQL, MongoDB, HTML5, CSS3, Webpack, Babel, Google App Engine, Typescript, Python

## Projects

### Dividewise (*Splitwise Clone*)

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

Ruby on Rails, React/Redux, PostgreSQL, CSS, Javascript

- Created Redux slices-of-state to normalize database queries and increase single-page app responsiveness for bills, payments, users, comments, and friends
- Implemented Google OAuth2 authentication for Google accounts
- Validated a user's session token on CRUD operations to authorize incoming AJAX requests and constructed RESTful routes with JBuilder to output JSON
- Used Styled Components and animated CSS transitions on bill dropdowns and signup

### TypingFantasy (*Typing game in a fantasy setting*)

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

HTML5, Canvas, JavaScript

- Implemented custom movement with trigonometry to allow objects in the game to intuitively interact with each other following keypress event listeners' activations
- Engineered layers of abstraction in gameplay elements such as spawn-time and positions of enemies by relying on Object Oriented Programming techniques
- Integrated dynamic imports with webpack to split large Chinese or English language dictionaries based on user selection
- Used a trie data structure to match a typed word in  $O(\text{word length})$  time rather than  $O(\text{all words})$  time

### BoneThrow (*MERN stack group project with a backend focus*)

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

MongoDB, Express.js, React/Redux, Node.js

- Designed async/await functions in Express router with Axios promises to fetch user's geolocation data from Google Maps API
- Created a views-only Django API in Python to provide inverse Fourier Transform results of pet-related stock data later consumed by the React front-end with Chart.js
- Used localStorage to store users' dogs' sensitive weight data
- Calculated business logic on continuously-input dog-walk data inserted into MongoDB documents to deliver dog-walk recommendations to users

## Experience

**Support Engineer** | Maxwell Dynamics | Sept 2014 - Aug 2017

- Tested and documented geophysical measurement-while-drilling software
- Assisted at client sites

**Upstream Research Intern** | Aramco Services Company | May 2012 - July 2012

- Tested finite-difference time-domain software

## Education

**App Academy** | San Francisco, CA | Oct 2019 - Feb 2020

Immersive software development course with focus on full stack web development

**The University of Texas at Austin** | Austin, TX | May 2014

B.S., Petroleum Engineering, B.A., Economics