

ALLEN TAN

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Summary

Driven software engineer, changing careers after 6+ years as a mechanical engineer. Enjoy the challenge of finding solutions to complex problems by breaking them down into manageable pieces.

Technical Skills

Languages: JavaScript, TypeScript, Ruby, HTML/CSS, SQL
Frameworks/Libraries: React, Express, Ruby on Rails, Bootstrap
Other: Git, Chai, RSpec, CouchDB (noSQL)

Relevant Experience

Edge **May 2021 – Present**
Software Engineer Intern *San Diego, CA*

- Built the backend of a server that maintains information on the minimum amount required for a cryptocurrency swap, using Node, Express, and CouchDB (noSQL)
- Developed a snack bar web application in React that fetches cryptocurrency exchange rates using promises, and shows a QR code for payment when the user selects a currency
- Reviewed code on PRs (pull requests) for Edge's fee tracker and theme server
- Maintained clean Git commit history for contributions to open-source codebase by utilizing rebase and cherry-pick
- Fixed bugs and added functionality to existing internal tools, including the reports server and logs server
- Created unit tests using Chai and Mocha for utility functions that helped retrieve and insert swap provider information into a CouchDB database

Projects

Edge Swap Server | *TypeScript, Node, Express, CouchDB* **Sep 2021**

- Built a server that maintains the swap information for multiple providers and cryptocurrencies
- Created a helper function that utilizes the binary search algorithm to find the minimum amount
- Wrote middleware in Express that gets the latest minimum amount information from the database

Edge Snack Bar | *TypeScript, React, CSS* **Jun 2021**

- Developed an application to generate payment QR codes for Edge's in-office snack bar
- Created a helper function to asynchronously fetch exchange rate data for 19+ cryptocurrencies using promises
- Utilized CSS and the style attribute in React to make a responsive web application

Pokedeck | *JavaScript, Ruby on Rails, React, RSpec, Enzyme* **Apr 2021**

- Developed a Pokemon Trading Card Game where users compete to have the most valuable collection
- Designed back end API that allows users to claim their initial booster pack of 10 cards, claim their card that becomes available after 24 hours, and view their ranking
- Produced unit tests for the back end controllers using RSpec, and for the front end React components using Enzyme

Other Experience

Solar Turbines (via Volt) **Jan 2017 – Dec 2020**
Senior Engineer (NPI Combustion Mechanical Design) *San Diego, CA*

- Developed dozens of new combustion components, including fuel injectors, liners, and fuel systems, using computer-aided design (CAD) and multiphysics simulation software

Mikroscan Technologies, Inc **Jan 2015 – Jan 2017**
Mechanical Design Engineer *Carlsbad, CA*

- Managed multiple aspects of the SL5 hardware, including design, procurement, and inventory management

Education

San Diego State University **2012 – 2015**
Master of Science in Mechanical Engineering *San Diego, CA*

University of California, San Diego **2007 – 2012**
Bachelor of Science in Mechanical Engineering *La Jolla, CA*