Thomas Tran

E-mail: tat022@ucsd.edu | Phone: (858) 428-4211 |
Home Address: 11385 Paymogo Court, San Diego, CA 92129
Website: thomasatran.github.io | GitHub: github.com/thomasatran

Technical Skills

Proficient: Javascript, C++, C, Java, Python CSS,C#, VBA,HTML

Libraries/Frameworks: React, Node.js, Angular, Bootstrap, Pandas, Mongoose, Postman, MongoDB, CSS Grid, JQuery, Passport.js, Express, socket.io

Education

UC San Diego
Major: Computer Science
Expected: June 2020
GPA: 3.7 (3.694)

Relevant Courses:

- Advanced Data Structures
- Discrete Mathematics
- Operating Systems
- Data Science in Practice
- Math/Algorithm Analysis
- Computer Organization and Systems
- Software Engineering
- Theory of Computation

Clubs and Hackathons:

- SD Hacks
  - AR 2nd Place
- Hack XR
  - Best Multiplayer Game
  - 2nd Place Overall
- Placed 1st in Article Innovations Hackathon

Work Experience

Article Innovations
Software Development Intern
June - September 2018

- Took course on full-stack development with Node.js, MongoDB, and git
- Learned and practiced agile scrum development process
- Worked on a cross-functional team of data scientists and software developers
- Implemented robust Data Layer which manages API calls and data caching which provides faster analyzer run times
- Designed and implemented frontend of KPI Dashboard and a backend REST API to communicate sales and other key performance indexes

California Institute of Biomedical Research
Software Development Intern
June-September 2017

- Built and maintained frontend of company internal website UI using Javascript and CSS
- Improved drug dispensing calibration software using C sharp through an improved GUI and text editor

Projects

Article Innovations KPI Dashboard
June 2018 - September 2018

- Implemented REST API to display key performance data and communicate to a python microservice using Javascript, and Express.js
- Used Helmet.js, express-session, and mongo-connect to sanitize requests and ensure cookie usage was safe and scalable.
- Implemented and designed using a MEAN stack
- Designed dashboard page using Bootstrap and Angular

Article Innovations Data Layer
June 2018 – September 2018

- Designed and Implemented robust and stateless data layer backed by priority queues to manage and cache API calls
- Using Javascript, express.js, and MongoDB, the data layer provides a REST API to streamline API requests and allow for a more flexible backend design

San Diego Streetlight Analysis
March 2018

- Ran a statistical analysis of street light effectiveness in San Diego using Python, geocoder, pandas, and numpy
- Provided insights and visualizations to suggest potential causes of collisions in the city

Text Auto Completer
January 2018

- Wrote program in C++ that returns auto-completed text suggestions when provided text reference data
- Used ternary search tree data structure to store the input dictionary

Markov Document Generator
February 2018

- Implemented Dijkstra's algorithm in C++ to find connections between actors and graph theory to predict potential links between them

Link Predictor – Actor Interactions
March 2018

- Wrote program in C++ that creates a new document using Markov Chain process based on an input reference file