Tyler Tran

USC Viter bi
School of Engineering

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Technical Skills

Languages & Databases: Java, Javascript, Python, C++, HTML / CSS, MongoDB, SQL

Frameworks & Tools: React, Node.js, Flask, Spring, Express.js, Git, AWS, JUnit

Skills: Object-Oriented Programming, REST APIs, Full stack, Frontend, Backend, Data Science, Testing

Knowledge: Cloud Platforms, SW Development Lifecycle, Testing, Mobile Development, Web Development Framework

Education

University of Southern California, Viterbi School of Engineering - Los Angeles, CA

Aug 2021 - May 2025

Bachelor of Science: Computer Science & Business Administration

GPA: 3.81

Minor: Artificial Intelligence Applications

• CS Coursework: Statistics, Data Structures, Software Development, Algorithms, C++, Python, AI

Work & Experience

USC Viterbi School of Engineering (Computer Science)

Aug 2023 - Present

Course Staff

Los Angeles, CA

- Prepared homework material to help students **master key algorithms concepts** including graphs, dynamic programming, greedy algorithms, and NP-completeness.
- Worked Collaboratively with professor and staff to refine course content to match appropriate difficulty level for course standards
- Explain advanced concepts in computer algorithms to students and provided constructive feedback to increase scores and provide support to nearly 300 students

USC Joint Educational Program

Aug 2023 - Present

Computer Science and Python Instructor

Los Angeles, CA

- Displayed leadership to student-teachers to plan and create lesson plans for 15-20 K-12 students to learn Python and CS
- Taught weekly lessons about fundamentals of Python programming, such as loops and functions
- Provided one-on-one mentorship during coding activities to assist struggling students and encourage advancement

Radiant Nails

May - Sep 2023

Full Stack Software Developer

Midvale, UT

- Increased appointment scheduling rates 10% by developing a personalized appointment scheduling system and website for a local business from product specification meetings to app deployment and management
- Employed modern technologies such as **Javascript**, **Node.js**, **Express.js**, and **MongoDB** to **design an API** for managing and reading appointment data to an analytics dashboard to visualize the success of services and areas for growth
- Analyzed client and user needs to determine design and implementation to ensure feasible project completion which ultimately reduced appointment scheduling times for the business by around 60%

Software Projects

Diabetes Detection (Machine Learning) | Python, Pandas, SciKitLearn

Sep 2023

- Developed classic machine learning algorithms to analyze patient data and predict if someone will have diabetes
- Utilized Pandas Dataframes, and several other Python Libraries to analyze, plot, and make predictions

Plan My Day (Route Optimization Trip Planner) | Android, Java, Google API, JUnit

Sep 2023

- Followed practices of iterative development to implement a route optimization android app to plan trips
- Integrated Maps SDK and Google Maps API for Android to display interactive maps and directions
- Leveraged knowledge of testing and JUnit to validate functionality and publish a production quality mobile application

Roomiez (Roommate Organization WebApp) | React, Java, SpringBoot, SQL, AWS

Feb - Apr 2023

- React and SpringBoot full stack project to create and test web application to manage roommates and tasks
- Utilized skills in **Java**, **SpringBoot**, Hibernate, **React**, and **SQL** to design app infrastructure and create a multi-platform application to handle **user authentication** as well as tasks specified by users
- Leveraged knowledge of cloud computing by using AWS to deploy both the react and Spring applications

Food Finder (Recipe Search Web Application) | Python, Flask, Pandas

Feb 2023

- Developed web application to find food recipes based on users' needs (calories, ingredients, etc)
- Applied skills in **Pandas**, **Flask**, **Python**, **HTML** and **CSS** to streamline the process of searching through thousands of recipes, managing large data sets, and displaying them in an convenient application **decreasing search times by 90%**

Interests: Software Engineering, Information Technology, Music, Piano, Dancing, Electric Cars, Gym