David Xiu

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EXPERIENCE

• Fortinet Sunnyvale, CA

Software Development Intern

June 2022 - September 2022

- Worked closely on a team with Senior IOS developers and Designers to develop an IOS application using MVC design patterns and SwiftUI.
- Created 15+ UI views to streamline IOS to Fortinet product connectivity, reducing development time by 2 weeks.
- Successfully utilized Swift frameworks to establish a secure Bluetooth connection, and transfer and receive data from Fortinet products.

• Data Structures and Algorithms Learning Assistant

Irvine, CA

Learning Assistant / Tutor

September 2022 - Present

- Engaged with over 300 undergraduate students during lecture and lab help hours to ensure proper understanding of algorithm analysis and data structures.
- Organized test reviews for 100 students to further support the students before exams.

PROJECTS

- Astro Checker (VenusHacks 2022 Best NLP Hack Winner)
 - Fixed issues in speech to text transcriptions, filling in gaps created by audio artifacts.
 - Developed a responsive website with python backend frameworks such as Flask and HTML/CSS for frontend.

• Online Cloud Storage Application

- Designed an application in C which allows clients to connect to a server and users are then able to upload and download files from the online cloud storage.
- Utilized TCP Sockets to form connections between clients and servers.
- Integrated multithreading to allow for multiple client connections at once.

• Search Engine

- Designed and implemented a search engine from scratch using Python.
- Crawled and indexed over 100,000 web pages from a specific domain, and applied NLP techniques such as stop word removal and lemmatization to preprocess the raw text.
- Implemented cosine similarity scoring and TF-IDF scores to generate ranked search results for the user.
- Optimized the search engine performance by implementing various heuristics such as word position indexing and anchor word indexing.

EDUCATION

- University of California Irvine, Irvine, California (2020 Present)
 - Pursuing a Bachelor's Degree In Computer Science
 - o GPA 3.78 / 4.0
- Dougherty Valley High School, San Ramon, California (2016 2020)
 - High School Diploma: June 2020

SKILL SET

- Languages: C/C++, Python, Java, MIPS Assembly, Swift / SwiftUI
- Developer Tools: VS Code, Pycharm, Visual Studios, XCode, Alteryx, Tableau
- Technologies / Frameworks: Linux, Git, Flask, AWS
- Coursework:

Computer Architecture / Operating Systems
 Discrete Math

Design and Analysis of Algorithms

Data Structure Implementations and Analysis

Data Mining and Machine Learning Programming in C/C++ and Python