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 text data.
    - Developed a GUI that allows users to input queries and receive ranked search results based on TF-IDF scores and importance of keywords in important HTML tags.
    - 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*
    - *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