Dillan Merchant

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WORK EXPERIENCE

Workday Inc., Pleasanton, CA – Software Application Engineer Intern

Jun 2022 – Sep 2022

- Helped approximately 100 customers better organize financial data by deploying a feature within Workday's financial system that allows users to add, edit, and approve transaction attachments
- Enhanced customer data privacy and handling by implementing userbase security models to individualize access to certain features
- Improved customers' ability to analyze data by extending the custom reporting functionality and providing greater visibility of related data within the Workday platform
- Conducted an Impact Analysis of a critical production bug affecting the financial data of Workday's financial system customers

Cubic Corporation, San Diego, CA – *Software Engineer Intern*

Mar 2021 – Jun 2022

- Worked to improve connectivity/networks for natural disasters and military deployments
- Developed bash scripts to automate and facilitate testing of network nodes which cut testing time in half
- Handled network link adaptation, specifically calculation of power allocation to links based on environmental conditions in order to optimize power usage

SoftClouds LLC, San Diego, CA – *Software Engineer Intern*

Jun 2020 – Sep 2020

- Developed "AppManager", an app that facilitates the monitoring and managing of apps on Android devices to organize and optimize user's storage
- Created the app documentation for user ease of use, designed the wireframes with InVision, and used Android Studio to implement the backend logic with Java and frontend with XML
- Published AppManager on Google Playstore

SKILLS

Java, C, C++, Python, HTML/CSS, JavaScript, Microsoft Office, MATLAB, Vim/Unix/Bash, ARM, XML, SQL

EDUCATION

Undergraduate: University of California, San Diego, Jacobs School of Engineering

Jun 2019 - Jun 2022

Emphasis: Computer Science

Relevant Coursework: Data Structures, Software Tools (GitHub), Object-Oriented Programming/Design, Design/Analysis of Algorithms, Computer Organization and Systems Programming, Database System Principles, Recommender Systems/Web Mining, Computer Architecture, Intro to Computer Security

ACADEMIC PROJECTS

Pomodoro Timer: Built a web app with a team of classmates that consisted of the Pomodoro study technique along with a convenient task list to help others with organization and time management. Increased HTML/CSS/Javascript knowledge along with team bonding, organization, and efficiency in an Agile environment

YogurtWorld Website: Responsible for full stack web development of YogurtWorld website to drive traffic, boost both customer satisfaction and user experience, and offer greater accessibility by fostering a more versatile platform to be used across a variety of devices and screen sizes

Huffman Encoding/Compression: Created a lossless file compressing and uncompressing program in C++ that consisted of building a correspondent Huffman Tree and reading/writing through Bitwise I/O buffers

Graphs: Developed a proper data structure to represent a graph and performed algorithms such as Breadth-First Search and Dijkstra's Algorithm to provide shortest path information most efficiently