

Dillan Merchant

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EDUCATION

Undergraduate: University of California, San Diego, Jacobs School of Engineering - Warren College *Present - Jun 2022*

Emphasis: Computer Science **GPA:** 3.85 **Standing:** Junior

Relevant Coursework: Advanced Data Structures, Software Tools & Techniques (GitHub), Object-Oriented Programming/Design, Mathematics for Algorithms/Systems, Computer Organization and Systems Programming

High School: Rancho Bernardo High School, San Diego, CA

Aug 2015 - Jun 2019

Cumulative GPA: 4.3

Certifications: Fraternity of Academic and Civic Excellence (Top 30 GPAs of school)

Palomar Community College – San Marcos, CA

Jun 2017 - Dec 2018

Courses Taken: Programming Fundamentals I (Language - C), Programming Fundamentals II (Language - Java), HTML Basics, JavaScript, Multi-Variable Calculus

WORK EXPERIENCE

SoftClouds LLC, San Diego, CA – Software Engineer Intern

Jun 2020 – Sep 2020

- Developed "AppManager", an app that facilitates monitoring, managing, and uninstalling apps on Android devices
- Within the project, dealt with updating/creating the documentation, designing the wireframes with InVision, and using Android Studio to implement the backend logic with Java and frontend with XML
- Published [AppManager](#) on Google Playstore

Math Tutor, San Diego, CA - Self - Employed

Aug 2018 – Present

- Interacted with a diverse range of students from grades 6th - 12th to help enhance their mathematical skills, work habits, and test-taking strategies and elevated academic performance for some students by 20%

SKILLS

- **Skills:** Java, C, C++, HTML/CSS, JavaScript, Microsoft Office, MATLAB, Vim/Unix/Bash, ARM Assembly, XML

ACADEMIC PROJECTS

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

Data Structure Implementations: Coded our own implementation of the Linked List, Stack, Queue, Binary Tree, Hash Table, and Heap data structures in C and Java within the Unix environment

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

LEADERSHIP EXPERIENCE

South Asian Culture Show/Charity, San Diego, CA - President, Choreographer, Website Coordinator *Aug 2016 - Jun 2019*

- Led student run charity organization with approximately 150 participants which raised almost \$10,000 towards the Malala Fund and Akshay Patra Foundations
- Maintained the organization's website changes and updates with new info, dances, links

Holly's Garden Rescue, El Cajon, CA - Facebook Admin and Website Coordinator

Aug 2015 - Jun 2019

- Managed social media efforts such as Facebook and Instagram to advertise and promote rescue dogs which resulted in an increase of website traffic by 25% over the course of the year.
- Maintained a user- friendly website which included uploading and keeping current pictures and bio info for our available dogs, upcoming adoption events and success stories.