

Ankit Sachdeva

ankit@ucsc.edu ◊ ankitsachdeva.com ◊ github.com/ankitsxchdeva ◊ in/ankitsxchdeva

Education

University of California, Santa Cruz

September 2020 - December 2023

Bachelor of Science (B.S.) in Computer Science and Engineering

GPA: 3.8/4.0

Involvements: Cycling Club, Badminton Club, Santa Cruz Mountains Trail Stewardship, Tech4Good

Relevant Coursework: Programming Abstractions, Data Structures and Algorithms, Computer Architecture, Computer Networking, Computer Systems Design, Functional Programming, Assembly Language, Embedded Systems, Artificial Intelligence

De Anza College

September 2022 - December 2023

Associate in Arts (A.A.) in Marketing Management

GPA: 4.0/4.0

Relevant Coursework: International Marketing, Introduction to Selling, Advertising, Principles of Marketing, Principles of E-Commerce

Projects

Personal Custom Keyboard Brand

ankitsachdeva.com/keyboards

- Established a brand and implemented an online strategy resulting in 3000+ sales across multiple product categories
- Successfully built and cultivated a thriving online presence, most notably a 2000+ member keyboard-related Discord server
- Designed a diverse portfolio of custom keyboard products, demonstrating a deep understanding of market trends

Unmasked Android Application

ankitsachdeva.com/unmasked

- Designed and wrote an Android application to scan cosmetic items and highlight potentially harmful or allergic ingredients
- Utilized Firebase and Google OCR API with image enhancement, written with a mix of Kotlin and Java in Android Studio

Pintos Operating System

ankitsachdeva.com/pintos

- Modified the Pintos educational operating system to support priority-based thread scheduling and priority donation between threads
- Added support for a more efficient version of the "timer sleep" system call that improves performance by removing busy-waiting

Huffman Compression Algorithm

ankitsachdeva.com/huffman

- Implemented the lossless Huffman Compression algorithm in C with low level system calls for I/O reads and writes
- Created and utilized fundamental data structures including nodes, queues and stacks and performed bit-wise operations

Experience

PayPal

San Jose, CA

Software Engineer Intern

June 2022 - September 2022

- Investigated the potential of moving the settlement team's file exchange processes to a blockchain based stack
- Designed and implemented a proof-of-concept with solidity to collect metrics including throughput, reliability and robustness

Baskin School of Engineering at UCSC

Santa Cruz, CA

Group Tutor

March 2022 - Current

- Group tutor for Computer Systems and C Programming, a course focusing on computer systems and algorithm design
- Duties include aiding students with debugging code, grading exams, and maintaining course infrastructure such as GitLab CI/CD

Tech4Good Lab

Santa Cruz, CA

Undergraduate Researcher

January 2022 - March 2022

- Modified the Salesforce AI Economist tax model to analyze scaling of apprenticeship learning under Professor David Lee
- Added actions and other variables to new and existing agents in order to model different styles of apprenticeship programs

Fox Factory

Scotts Valley, CA

Embedded Software Engineer Intern

September 2021 - January 2022

- Performed QA related tasks such as creating test plans, conducting regression testing, and overseeing environmental testing
- Developed firmware for the Live Valve project's embedded systems in C utilizing the Nordic nRF52 SDK and SoC
- Designed Python tools to be used in EOL testers to perform QA related tasks, verify hardware and firmware functionality

Skills

Marketing Skills

- Digital Marketing, SEO & SEM, Social Media, Email Marketing, Data Analysis, Content Creation, Google Analytics, Brand Positioning

Engineering Skills

- Go, Python, Bash, Java, C/C++, MIPS Assembly, RISC-V Assembly, SQL, HTML/CSS, JavaScript, Kotlin, Swift, Git, SVN, Flask, Node.js, Express, React, MongoDB, NumPy, Pandas, Matplotlib, LaTeX, Docker/Podman, AWS