

Patrick Wong

510-679-8328 | pattywong2882@gmail.com | [linkedin.com/in/patrick-wong288](https://www.linkedin.com/in/patrick-wong288) | github.com/patrickwong28

Education

University of California Irvine

Irvine, CA

Bachelor of Science in Computer Science: **Overall GPA: 4.0**

Sept. 2023 – Present

Chabot College

Hayward, CA

Associates in Computer Science: **Overall GPA: 3.93**

Aug. 2021 – May 2023

- **Relevant Coursework:** Data Structures & Algorithms, Object-Oriented Programming, System Design, Human-Computer Interaction, Discrete Mathematics

Technical Skills

Languages: C/C++, JavaScript, TypeScript, Java, HTML/CSS, Python

Frameworks: React, Node.js, Chart.js

Technologies: VS Code, Visual Studio, Git, GitHub, GDB

Experience

Cognixion Internship

Jul. 2021 – Aug. 2021

Software Engineer Intern

Remote

- Facilitated in the development of a full-stack web application using Flask, Jinja, Google Trends, and Urban Dictionary API to analyze slang data from user's uploaded text conversations
- Invented methods to pool together data in conjunction with Chart.js which allowed for data visualization through graphs for front-end development
- Developed a web application that resulted in quicker data collection for Cognixion's natural language processing technology among 50 employees
- Conducted surveys and logged 100+ slang words onto spreadsheets every week to train their AI to be highly accurate in identifying slang vocabulary

Projects

Simple Shell | C

Feb. 2024 - Present

- Developed a comprehensive C program cloning the functionalities of the command shell interface on the Linux operating system
- Applied the fork system call to allow for the parallel execution of programs and establish control flow within the simple shell program
- Managed contents of large text files and implemented the piping command from scratch to perform multiple processes simultaneously
- Leveraged the Valgrind programming tool for memory debugging and ensure memory leaks aren't present to cause failure in the system

Picto-Sketch | JavaScript, CSS, HTML

Aug. 2023 - Sept. 2023

- Deployed a web application using React, JavaScript, HTML, and CSS to allow 35 users to create digital drawings
- Utilized DOM manipulation to dynamically modify the styling and positions of HTML elements on the user's interface for interactivity purposes
- Researched UI/UX usability principles to guide front-end development, and implemented the feature of consistency for the navigation bar and button components so users can focus on the application's tools

Path Finder | C++

Dec. 2022

- Designed a complete program using C++ to determine the shortest path for airplane flights among 200+ cities by reading input data from text files
- Implemented a modified version of Breadth First Search to generate an adjacency list of possible destinations for departure cities for efficient use of memory
- Utilized the built-in debugger tool on Visual Studio to ensure all memory was deallocated and to test for memory leakage