

Ralph Parin

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EDUCATION

University of California, Irvine
Bachelor of Science in Computer Science

GPA: 3.613 Irvine, CA
Sep. 2020 – June 2023

Pasadena City College
Associate's in Natural Sciences

GPA: 3.852 Pasadena, CA
Sep. 2017 – June 2020

RELEVANT COURSES

Requirements Analysis and Engineering, Human Computer Interaction, User Interaction Software, Information Retrieval, Design and Analysis of Algorithms, Data Structure Implementation and Analysis

PROJECTS

Graphing Calculator | *C++, SFML*

- Support for multiple graph types, including Cartesian, and polar graphs
- Created a custom parser based on postfix notation to ensure accurate calculations and handle errors easily
- Developed advanced features like saving graphs, zooming, dragging, and displaying multiple graphs

Sudoku | *Python, Tkinter*

- Developed a Sudoku generator algorithm to create unique puzzles with varying levels of difficulty
- Created a detailed help menu with clear instructions and undo/redo buttons for improved gameplay experience
- Implemented custom error checking to enforce Sudoku rules and prevent invalid inputs

Sleep Tracker | *Angular, HTML, CSS, Firebase, Git, Ionic*

- Designed a user-friendly interface for easy logging of fatigue levels, wake-up mood, and sleep history tracking
- Cross-platform compatibility for both iOS and Android devices
- Utilized Firebase to create a secure and reliable cloud-based database to store user data

DataQL | *C++*

- Created a database management system utilizing data structures like linked lists, maps, and binary trees
- Developed a custom finite-state machine to parse user commands
- Implemented a range of features, including load, insert, select, save, delete, and show data

TECHNICAL SKILLS

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

Frameworks: Angular, Ionic, Tailwind

Developer Tools: Figma, Firebase, PyCharm, VS Code, Visual Studio, Git

Libraries: NumPy, Pandas, SFML, Tkinter