Ralph Parin

r.parin070@gmail.com | [Linkedin](#) | [Github](#) | [Portfolio](#)

EDUCATION

University of California, Irvine — Irvine, CA
Bachelor of Science in Computer Science, Minor in Informatics — *Sep. 2020 – June 2023*

Pasadena City College — Pasadena, CA
Associate's in Natural Sciences — *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

Font Viewer | *Angular, HTML/CSS, Firebase, Git*
- Developed a web application that enables users to browse through various fonts and preview them in real-time
- Utilized Firebase to allow users to save their favorite fonts and access them later
- Designed the application to be responsive and accessible across multiple devices and browsers

Text Editor | *Java*
- Designed a user-friendly interface for easily creating, editing, and saving text files
- Utilized Java Swing for cross-platform GUI compatibility, allowing it to operate on multiple operating systems
- Implemented a variety of features, including font stying, sizing, and switching

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++, HTML/CSS, JavaScript, Python, SQL (Postgres), TypeScript, Java
Frameworks: Angular, Ionic, Node.js, Tailwind
Developer Tools: Alchemy, Eclipse, Figma, Firebase, IntelliJ, PyCharm, VS Code, Visual Studio, Web3Auth, Git
Libraries: NumPy, Pandas, Seaborn, SFML, Tkinter, Matplotlib