

# Ralph Parin

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## EDUCATION

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### University of California, Irvine

*Bachelor of Science in Computer Science, Minor in Informatics*

Irvine, CA

*Sep. 2020 – June 2023*

### Pasadena City College

*Associate's in Natural Sciences*

Pasadena, CA

*Sep. 2017 – June 2020*

## PROJECTS

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### 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 styling, sizing, and switching

### MySQL | C++

- Created a MySQL library 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

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**Languages:** C/C++, HTML/CSS, JavaScript, Python, SQL (Postgres), TypeScript, Java

**Frameworks:** Angular, Ionic, Node.js, Tailwind

**Developer Tools:** Alchemy, Eclipse, Firebase, IntelliJ, PyCharm, VS Code, Visual Studio, Web3Auth, Git

**Libraries:** NumPy, Pandas, Seaborn, SFML, Tkinter, Matplotlib