# Alexis Rodriguez

#### Education

# Pasadena City College

Engineering and Technology (AA), Natural Sciences (AS), Mathematics (AS-T)

## Technical Skills

Languages: C++, Java, Python, Typescript, Javascript, HTML/CSS, LaTeX, Markdown, Command Line

Developer Tools/Environments: VS Code, CLion, Pycharm, Webstorm, Android Studio, drawio, MacOS, Windows

Technologies/Frameworks: GitHub/Git, Ionic, Angular, ReactJS, React Native, SFML, Arduino

# Experience

# Pasadena City College

Pasadena, CA

Front End Developer Intern

October 2021 - Present

Expected: June 2023

- Led project team members in implementing a nutritional database hosted on the LibreText platform.
- Utilized React framework, NodeJS, ExpressJS, MongoDB, Javascript, HTML, and CSS in the development of a public nutrition learning tool for students nationwide.
- Implemented scrum agile software development life cycle to gather user requirements and code a tool for individuals to monitor their nutritional goals.
- Maintained best practices to create reusable, concise web components for various aspects of the project.

Software Engineer Intern

December 2020 - Present

- Helped the college improve overall communication to students by developing a hybrid mobile application for Android and IOS platforms.
- Quickly excelled at "on the job" learning through vast research of Angular, Ionic, Typescript, HTML, and CSS documentation.
- Led the team design meetings to ensure detailed and comprehensive documentation for future developers using drawio (workflow and UML diagrams) and markdown files for the different app features.
- Met with clients regularly to guarantee all requirements were met.

Computer Science Tutor

March 2020 - Present

- CRLA Level 1 Tutoring Certification
- Ensured that all students left each session with better understanding of the curriculum.
- Worked one-on-one and in groups to problem-solve our way toward understanding.
- Went above and beyond preparing guides on how tackle concepts for the diverse student population.
- Encourages and succeeded at instilling good practices such as design documents, proper commenting, time management, asking questions.
- Made sure students felt supported and had access to all the great resources online such as videos, documentation, and student success groups.

### National Aeronautics and Space Administration

Edwards, CA

NASA Community College Aerospace Scholar (NCAS)

September 2019 - October 2019

- Chosen to participate in the onsite experience at Armstrong Flight Research Center in Edwards AFB, CA after completion of the intense online program about NASA missions.
- Put forth a team effort to design and program a rover, using a LEGO Mindstorm EV3, that could retrieve rocks, call out minerals, and rescue lost rovers.

# Volunteer / Extracurricular

### MATE ROV Competition

Pasadena, CA

Developer

November 2021 - Present

- Researched marine robotics and aided in building the underwater rover, as well as developed automation capabilities.
- Collaborated with mentors and peers to integrate Arduinos and Raspberry Pi into this multi-level project.

#### **Projects**

Frogger | C++, SFML | Recreated the iconic 80s game. Implemented key data structures and learned a lot about 2D space. **Texas Hold'em** | Python, pyqame | Utilized GitHub and Markdown language to develop a well documented Python project. **PCC** Mobile App | Typescript, Ionic, Angular | Key developer in creating a communication hub for Pasadena City College. **Solitaire**  $\mid C++, SFML \mid$  Created drag and drop SFML class to move cards around the board.

Tic Tac Toe 2.0 | Java | Unique take on Tic Tac Toe. Up to 10 players. User decides what it takes to win the game.