

# Troy Good

Website: [tgood13.github.io](https://tgood13.github.io)

Phone: +1 714-345-3405

Github: [github.com/tgood13](https://github.com/tgood13)

Email: [troygood13@gmail.com](mailto:troygood13@gmail.com)

## EDUCATION

---

- **University of California, Irvine** Irvine, CA
  - *B.S. Major: Computer Science — Minor: Statistics; GPA: 3.8* *Sep. 2018 - Jun. 2022*
    - **Relevant Coursework**  
Data Structures and Algorithms, Programming with Software Libraries, Principles in System Design, Software Engineering, Computer Organization, Boolean Logic and Discrete Structures, Linear Algebra, Probability and Statistics for CS, Statistical Methods for Data Analysis I-II

## PROGRAMMING SKILLS

---

- **Languages:** Python, C++, C, Swift, R **Technologies/Tools:** Git, Unity, Xcode

## PROJECTS

---

- **ChessAI**
  - A singleplayer chess game created from scratch using Python and the Pygame library
  - Implemented AI opponent using minimax algorithm along with alpha-beta pruning for increased speed
  - Utilized multi-threading so that display updates while AI determines move
  - Published a YouTube video explaining minimax algorithm and code for the AI
- **BlockRunnerAI**
  - Created a 3D blockrunner game in Unity
  - Trained an AI to play using Unity's Machine Learning Agents Toolkit
  - Published a YouTube video explaining reinforcement learning and code for ML Agents
- **ChatUCI**
  - An iOS application that allows UCI students to communicate with one another via course-specific chatrooms
  - Developed in an agile scrum team with an emphasis on incremental development
  - Handled user login and stored chatroom data using a Parse Server which utilized an underlying Mongo database
  - Pulled course data directly from the UCI website via web scraping and HTML parsing using the Alamofire and SwiftSoup libraries

## ACTIVITIES/SOCIETIES

---

- **Artificial Intelligence at UCI** *May 2020 - present*
  - *Lead Mentor*
    - A nonprofit student-run organization that focuses on promoting and cultivating the discipline of artificial intelligence and machine learning and its applications among the UCI community
    - Manage a team of mentors to deliver high-quality workshops on projects related to AI
    - Organize regular meetings with mentors and club executives
- **Campuswide Honors Collegium** *Feb. 2020 - present*
  - *Member*
    - A highly selective academic program that requires me to take four additional honors courses and participate in four quarters of undergraduate research under the direction of a faculty mentor

## EXPERIENCE

---

- **Libra** Open-Source Software
  - *Software Developer* *Jul. 2020 - Sep. 2020*
    - Libra is a machine learning API designed for non-technical users which automates the end-to-end machine learning process with just one line of code
    - Worked in the data team to implement a feature image graph that shows stage-by-stage image representations for a convolutional neural network
- **CodePath** *Mar. 2020 - Jun. 2020*
  - *iOS Development Course*
    - 10 weeks of intense, project-focused iOS development using Swift and Xcode