Cristian Garcia

cristian.gspace@gmail.com   Hayward, CA   (510) 876-6808   github

EDUCATION

University of California, Irvine   Irvine, CA
Computer Science and Engineering | GPA 3.0   2021-2025
Relevant courses : Python Programming (ICS 31 - 33), C++ program (ICS 45C, 46C),
Linear Algebra (3A), Classical Physics (7C, 7D), Digital System/logic Lab (31, 31L)

Kipp King Collegiate High School   Hayward, CA
GPA 3.8 High Honors   2017-2021
Relevant courses : AP Calculus, AP Computer Science

PROJECTS

Colorful Graphs - C++

- Implemented a interference graph data structure to solve register allocation problems via graph coloring with the Welsh Powell algorithm.
- Successfully achieved the capability to load a complete graph with 1000 vertices in under 10 seconds, showcasing the efficiency and scalability of the interference graph implementation.
- Wrote Comprehensive unit tests to ensure functionality of the graph data structure and register allocation algorithm.

Task App - Swift

- Developed an iOS application using Xcode, prioritizing a intuitive interface that seamlessly adapts to various devices seizes.
- Conducted comprehensive testing to guarantee the app's stability, reliability, and optimal performance by utilizing JSONEncoder for a robust data storage and management system.

Personal Website - HML, CSS, JavaScript

- Designed and developed a personal website to showcase my software development skills and personal interests.
- Implemented JavaScript to add dynamic and interactive feature, and to incorporate third-party APIs and libraries, built using Visual Studio.

WORK EXPERIENCE

Personal Tutor   January 2023 - PRESENT

- Provided Personalized one-on-one tutoring for two college students in Boolean Logic and Intro/ Intermediate Programming, resulting with an average of 92% across three classes.
- Strengthened communication and instructional abilities by tutoring two children in mathematics, focusing on foundational math concepts and problem-solving skills.

SKILLS

Fields of Interest: Algorithms, Artificial Intelligence, Robotics, Interstellar space
Technical Skills: Python, C++, Swift, JavaScript, HTML, CSS, VHDL, Eclipse, Visual Studio, Xcode

CLUBS

Open Project Space - embedded programming with C++, integrated circuits   September 2022 - June 2023
Program held by IEEE, geared towards giving a hands on experience with embedded systems.
Built an interactive MP3 player, a weather station with wireless data capability, digital stopwatch, and an RC car.