Marcos Enrique Mancia Jr.

Jinnboi | Marcos Mancia | jinnboi.github.io | marcosmancia77@gmail.com

Summary

I'm a Columbia University student majoring in Computer Engineering. I'm a curious problem solver who excels in high-paced environments. I have a strong foundation in computer systems and software development, with experience in embedded systems and proficiency in Java, C++, C, and Python. My academic and project experiences have sharpened my technical skills and fueled my passion for innovation. I thrive on tackling complex challenges and am committed to leveraging my skills to develop impactful solutions. My goal is to contribute effectively to the field of computer engineering through continuous learning and growth.

Work/Lab Experience

Advanced Naval Technology Lab Aug 2022 - Dec 2022

- Gained hands-on experience with laboratory equipment, including: 3D printers, Resin printers, soldering irons
- Worked in a team setting to develop several projects of varying difficulty using Arduino and related components
- Designed, developed, and refined a drone to implement LIDAR technology to survey surroundings

Columbia Lab for Unconventional Electronics (CLUE) Jan 2023 - present

- Worked specifically on the acoustic communication aspect of a project in collaboration with several other student researchers
- Researched and experimented with a variety of communication techniques such as amplitude modulation, frequency modulation, and frequency-shift keying modulation
- Collected and analyzed data on the effect of distance or metallic interference between a transmitter and receiver via an oscilloscope and function generator
- Used STM32 and Arduino microcontrollers as well as separate chips/equipment to successfully modulate a sine signal with a square wave

Education

2023 - present	Bachelor's Degree at **Columbia University**	(GPA: 3.9/4.0)
2019 - 2023	High School Diploma at **Foothill Technology High School**	(GPA: 4.6/4.0)

Skills

Bilingual	Proficient in English and Spanish
Embedded Systems	Acquainted with basics of Arduino and STM32 microcontrollers. Learning more as part of my lab experience.
Machinery	Capable of using: 3D printers, resin printers, vinyl cutters, laser cutters, and CNC mills
Coding Languages	Proficient in Java, C++, C, and Python. Currently learning: HTML, CSS, JavaScript, and Bash
Computer Science Core Principles	Knowledge of foundational algorithms, data structures, and OOP fundamentals

Last updated: September 1, 2024