20530 Swecker Farm Place, Potomac Falls, VA 20165 USA

ENRIQUE CASILLAS

571.216.1748 casillasenrique2019@gmail.com

Summary

Graduate student at the Massachusetts Institute of Technology focusing on computer science and its applications. Excellent communication skills, attention to detail, and commitment.

Education

Massachusetts Institute of Technology

Masters of Engineering

Cambridge, MA Expected January 2024

Bachelor of Science in Computer Science and Engineering

June 2023

- Relevant coursework: Distributed Systems, Elements of Software Construction, Software Systems for Data Science, Big Data and Visualization, Computer Systems Engineering, Engineering Interactive Technologies, Introduction to Machine Learning, Design and Analysis of Algorithms
- GPA 4.9 / 5.0

Work Experience

Research Assistant at MIT Civic Data Design Lab

Spring 2022 - Present

- Assisted creating the designs and led the implementations of several full-stack web applications for humanitarian purposes. Clients include the World Food Programme for migration study and Transportation Alternatives for spatial equity and urban sustainability.
- Worked with several web development tools including Figma, Next.js, SvelteKit, Mapbox, MongoDB, and Twilio WhatsApp API, and used various Python data analysis libraries for wrangling and cleaning large amounts of data.

Amazon Devices Software Development Engineer Intern

Summer 2022

- Designed and implemented a command line tool in Python that analyzes device logs and performs custom user-specified analysis on them, saving developers time when performing bug triage.
- Collaborated with several component owners from the wider team to collect and implement various use cases for the tool, providing them with ways to find any potential issues with their components.

Amazon Software Development Engineer Intern

Summer 20

- Designed and implemented the entire backend for power controllers within device QA testing labs.
- Built tools in Python that allow for automatic device recovery using power control methods, saving lab engineers the time and effort needed to manually recover failed devices.

Conflict Kinetics Research Project

Summer 2020-Winter 2021

• Designed and implemented motion detection and tracking device to assist in training of military and law enforcement agencies using a Raspberry Pi, Python, OpenCV, servo control, and multiprocessing.

Undergraduate Research with MIT Materials Systems Laboratory

Winter 2019-2020

- Assisted research on the urban heat island effect by generating and analyzing complex simulation data.
- Used Rhino and Grasshopper to generate data and used JMP to perform analysis and find trends.

Additional Skills

- Proficient in Python, JavaScript, Git, test-driven development.
- Experienced with web-dev: React, Next.js, Vue, Node.js, Express, MongoDB, Firebase, SQL, D3, CSS/SCSS.
- Familiar with Java, C/C++, Go, C#, Arduino, Raspberry Pi, OpenCV, MATLAB, JMP, Rhino, blockchain tools.

Accomplishments

First Place Winner - MIT web.lab Competition

January 2022

- Created a full-stack web application supporting an immersive virtual casino that interfaces with the Ethereum blockchain, winning first place out of nearly 100 teams.
- Used a MongoDB, Express, React, Node.js stack with Solidity for custom tokens and NFTs.

Enrique Casillas 571.216.1748