

Maximo Machado

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EDUCATION

Massachusetts Institute of Technology | GPA: 4.7 / 5.0

May 2023

Candidate for Bachelor's Degree in Computer Science and Engineering

Cambridge, MA

- Relevant Coursework: Performance Engineering, Intro to Operating Systems, Design and Analysis of Algorithms, Computational Photography, Intro to Machine Learning, Computation Structures (Computer Architecture)

WORK EXPERIENCE

CUDA Performance Intern

June 2022 – August 2022

NVIDIA

- Prototyped multithreaded cache improvements resulting in a 2-3x performance increase
- Implemented performance benchmarks and made pertinent conclusions based off of data
- Presented findings to CUDA Performance team and broader CUDA team as possible inclusion into production

Product Engineering Intern

June 2021 – August 2021

John Deere

- Developed and presented demos for proof of concepts utilizing Python and AWS for new team of 5 people
- Created CI/CD pipelines deploying code onto AWS services using infrastructure-as-code tools such as Terraform
- Migrated essential licensing encryption servers to new testing environment providing much-needed added security

Full Stack Web Developer Intern

August 2020 – November 2020

Falcn Lab LLC

- Architected a Customer Relationship Management (CRM) providing better organizational tools for working with company clients
- Designed a SQL database schema with careful attention paid to normalization
- Extended Content Management System's (CMS) admin tools to assist company's ability to post new content and articles

PROJECTS

Spotify Playlist Manager

December 2020

Sole Developer

- Created a website that serves an average 150 monthly users, [spotifyplaylistmanager.net](#), that expands Spotify user's abilities to manage and manipulate their playlists
- Pushed nearly 200 commits to the GitHub repository while learning a large array of knowledge from full-stack development to deploying a website on local hardware with NGINX
- Wrote performant code by caching API requests and queuing jobs to sustain high server load

CourseRoad

September 2019 – December 2020

Team Member and Maintainer

- Extended features and improved usability of one of the two widely used MIT websites to plan out academic schedules
- Maintained a large codebase and database with frequent updates to keep in sync with MIT's class catalog
- Implemented petitioning classes giving the user more power to keep track of their progress

SKILLS

Programming Languages: C, C++, Typescript, Python, RISC-V Assembly, Bash

Frameworks: Node.js, React, Vue.js, Arduino

Other Tools: AWS, Drone.io, Terraform, NGINX, Linux, Git, Perforce, PostgreSQL, Redis