

Maximo Machado

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EDUCATION

Massachusetts Institute of Technology | GPA: 4.8 / 5.0

September 2019 – 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

WORK EXPERIENCE

CUDA Performance Intern

June 2022 – August 2022

NVIDIA

Virtual

- Prototyped 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

Virtual

- Led development and demos for greenfield team's proof of concepts to interested parties for upcoming products
- 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

Virtual

- Architected a Customer Relationship Management (CRM) that provided organizational benefits to company
- Designed a SQL database schema with careful attention paid to normalization
- Assisted company's ability to post new content and articles by extending the feature set of the admin tools for a Content Management System (CMS)

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 a website designed to plan academic schedules at MIT
- 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