# 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

- 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
- 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) 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, Redis*