# Maximo Machado

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### WORK EXPERIENCE

NVIDIA Santa Clara, CA

Software Developer, Deep Learning Libraries

Jul 2023 - Present

- · Work on library supporting GPU kernels that power DL libraries such as cuDNN, cuBLAS, and TensorRT
- Drove forward extension of project's CMake-build system to meet customer binary size concerns
- Flesh out test suite of project to exercise artifacts directly consumed by internal customers

CUDA Performance Intern

Jun 2022 - Aug 2022

- Prototyped multithreaded improvements in CUDA's compute cache 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

John Deere Remote

Product Engineering Intern

Jun 2021 - Aug 2021

- 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

Falcn Lab LLC Remote

Full Stack Web Developer Intern

Aug 2020 - Nov 2020

- · 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

### **EDUCATION**

## **Massachusetts Institute of Technology**

Cambridge, MA

Bachelor of Science in Computer Science

Sep 2019 - May 2023

- Honors: 4.7 / 5.0 GPA
- Courses: Performance Engineering, Design and Analysis of Algorithms, Engineering Data Analysis, Compiler Architecture

# **PROJECTS**

# **Spotify Playlist Manager**

Sole Developer

Dec 2020 - Dec 2020

- Created a website that serves an average 200 monthly users, spotifyplaylistmanager.net, that expands Spotify user's abilities to manage and manipulate their playlists
- Implemented the Multiple Playlist Searcher which Spotify implemented similar functionality 3 years later
- Wrote performant code by caching API requests and queuing jobs to sustain high server load and workaround Spotify API limitations

## SKILLS

- Languages: English
- Programming: C++, C, Python, Rust, Typescript
- Tools: CMake, Git, Docker, PostgreSQL, NGINX