

Joseph Martinez

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EDUCATION

Dartmouth College	Hanover, NH
<i>Master of Engineering</i>	June 2025
<i>Area of Focus: Computer Engineering</i>	
Amherst College	Amherst, MA
<i>Bachelor of Arts</i>	May 2022
<i>Major: Computer Science</i>	GPA: 3.4

ACADEMIC EXPERIENCE

Dartmouth College Singh Lab	Hanover, NH
<i>Research Assistant</i>	March 2025 - Current
<ul style="list-style-type: none">Propose and execute research plan to explore how model bias differs overtly and covertly for six different languages compared to English.Identify and run different LLMs with varying amounts of post-training and benchmark metrics to compare how post-training impacts overt and covert bias.	
Dartmouth College Learning Intelligence Signal Processing (LISP) Lab	Hanover, NH
<i>Research Assistant</i>	September 2024 - January 2025
<ul style="list-style-type: none">Tested the scalability of the GMRA (Geometric Multi-Resolution Analysis) algorithm by running experiments on datasets and embeddings of increasing sizes.Performed fine-tuning on the GMRA algorithm to increase performance metrics, such as accuracy, on diverse graph datasets.	
Amherst College Computer Science Department	Amherst, MA
<i>Peer Tutoring Fellow</i>	September 2020 – December 2021
<ul style="list-style-type: none">Nominated by the Computer Science Department to individually meet and support students' understanding of course concepts and lab assignments.	
<i>Teaching Assistant</i>	August 2020 – December 2020
<ul style="list-style-type: none">Assisted 20 students with debugging and conceptualizing weekly lab assignments.	
Amherst College Follette Lab	Amherst, MA
<i>Research Assistant</i>	June 2020 – December 2020
<ul style="list-style-type: none">Developed and designed a user interface using Bootstrap and Flask for an online tool to empower astronomers to make calculated decisions and save thousands of dollars.Presented innovative features from an online tool that improved users' long-term productivity at American Astronomy Society (AAS) for the 237th AAS Meeting.	

- Presented results of research project at Amherst STEM Summer Research Poster Session.

PROFESSIONAL EXPERIENCE

WillowTree (formerly Maark)

Boston, MA

Machine Intelligence Task Force

August 2023 - July 2024

- Promoted discussions and use of artificial intelligence at the Marketing Service branch.
- Host and coordinate office hours across departments for updates about new AI tools and resource-sharing.

Software Engineer

July 2022 - July 2024

- Implemented significant features, such as system outage alerts and new chapter types for presentations, on the Marriott Sales Companion App (MSCA), a web application engaging over 5,000 global enterprise users, using React, Javascript, and Sequelize.
- Researched and presented the pros and cons of different data visualization libraries to teammates.

Maark

Boston, MA

Summer Software Engineer Intern

June 2021 – August 2021

- Implemented unit and end-to-end testing for the MSCA to improve the project's code quality using Cypress and Jest in Javascript.
- Improved REST API used by MSCA by adding unit testing, updated authentication, and updated the database using Sequelize and Javascript.

Winter Software Engineer Intern

January 2021

- Updated the front end of the MSCA using React in Javascript.
- Created an ETL pipeline for customer data from MSCA in Node.js.

LEADERSHIP & ACTIVITIES

BlueDot Impact

Remote

AI Safety Alignment Course

June 2024 - August 2024

- Debated and evaluated the latest approaches to mitigating risks from AI systems.

Minds Matter Boston

Boston, MA

Junior Summer Programs Manager

September 2023 - June 2024

- Provided information to class of 30 students on application process for summer programs and managed application deadlines for students.

Mentor

November 2022 - June 2024

- Aid high school students in social-emotional skills needed to succeed in college.
- Assist students in developing vital skills like reading, writing, and test prep for college entry.

STEM Working Group

Amherst, MA

Member

September 2020 – October 2021

- Collaborated with other computer science majors to write a letter aimed at the Amherst College Department of Computer Science, pushing for more diverse and inclusive hiring practices.

La Causa Board Member

Amherst, MA

Activism Chair

September 2018 – May 2019

- Fostered and created relationships with outside organizations related to LatinX topics by inviting guest speakers.
- Organized events to raise awareness and build community among La Causa members and other student organizations.

PROFESSIONAL DEVELOPMENT

Cientifico Latino

Remote

GSMI 2024 Scholar

August 2024 - January 2025

- Selected as 1 of the 100 GSMI 2024 scholars (out of 400+ applicants) to participate in a mentorship program that provides one-on-one mentorship and graduate school application preparation.