

# Joseph Martinez

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## EDUCATION

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

## ACADEMIC EXPERIENCE

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

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

## PROFESSIONAL EXPERIENCE

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### 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

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### 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**

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### **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.