MARCOS ACOSTA | 340 E. Foothill Blvd. | Claremont, CA 91711 | 978.413.5078
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EDUCATION

B.S., Computer Science
Harvey Mudd College, Claremont, CA, Expected, May 2023, GPA: 3.957

Relevant Coursework

- CS 70: Data Structures / Program Development
- CS 124: Interaction Design
- CS 189: Programming Practicum
    - Developing full-stack skills and best practices, building full-stack web applications Spring 2021
    - Studying the mathematics and applications of the leading machine learning algorithms Fall 2020

Programming languages: Python, Javascript / Typescript / Node.js, HTML, CSS, Java, C++
Other relevant skills: React, Express, SQL, MongoDB, Git, Deep Learning, *Clean Code*, talking to people :)

WORK EXPERIENCE

Software Engineering Intern (Machine Learning), Masimo 5/2021 – 7/2021

- Use Computer Vision to extract data from videos of ECG monitors
- Apply Deep Learning methods from published ML papers to detect heartbeat irregularities in ECG data
- Contribute to a shared codebase between multiple software engineers

CS Grader & Tutor (Grutor), Harvey Mudd College 12/2020 – present
Grade, assist professors, and hold office hours for CS70: Data Structures / Program Development

LEADERSHIP EXPERIENCE

President, Harvey Mudd College Class of 2023 2019 – present

- Manage a yearly $600 budget for freshman class
- Organize events to promote community like study breaks, student-professor chats, and virtual challenges

Director of Projects at P-ai, the Claremont Colleges' AI incubator 2020 – 2021

- Responsible for overseeing the progress of four machine learning projects at P-ai to ensure project managers are staying on track and have the resources needed to succeed in their tasks
- Teach principles of machine learning in weekly hands-on workshops

Project Lead - Sign Language Recognition at P-ai, the Claremont Colleges' AI incubator Spring 2021
Lead a machine learning-oriented team in researching sign language recognition and building a computer vision / deep learning model to recognize multi-handshape signs

Project Lead - Music Generation at P-ai Fall 2020
Lead a team of machine learning enthusiasts in designing and developing a machine learning algorithm to generate novel jazz piano from MIDI data using an NLP approach

RESEARCH

Brown University / Google Research: Socially Responsible AI for Computational Creativity Spring 2021

- Researched a shortcoming of traditional Sign Language Recognition under faculty mentorship
- Built an Encoder-Decoder LSTM for translating multi-handshape signs to short phrases

Summer Research Intern at Keck Graduate Institute, Natural Language Processing Summer 2020

- Built an RNN classifier to distinguish tweets that are pro-vax / ambiguous / anti-vax with 80% accuracy
- Assisted other team members in programming / classification challenges

PROJECTS

Developed Metaschedule, a web app that helps students at the Claremont colleges plan their course schedule by generating possible permutations that match user criteria 2020

Developed WA GPS, an online web app to guide freshmen at my high school to their classes 9/2018

- Over 1k user sessions to date, included in Freshman Orientation

VOLUNTEER EXPERIENCE

Piano Teacher / Mentor, Music Mentors of Pomona Valley 2019 – 2020
Offered weekly piano lessons to students whose families could not afford paid lessons