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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