MSC 682 1200 E. California Blvd. Pasadena, CA 91126 Jeffrey J. Ma ima@caltech.edu (408) 406-4015 <u>U.S. Citizen</u> 4660 Metropolitan Way San Jose, CA 95135

GOAL

· Looking for 2020 summer internships or research opportunities in computer science or economics.

EDUCATION

California Institute of Technology (Caltech)

2018 - Present

- GPA: 4.13. Majoring in Computer Science and Economics, B.S. expected 2022.
- Relevant Coursework: CS156A (Learning Systems, Python), ACM104 (Applied Linear Algebra), CS24 (Computing Systems, C); CS21 (Decidability and Tractability); CS2 (Data Structures, Java); Ma/CS 006A (Discrete Mathematics), CS11 (Computer Language Lab, C)

WORK EXPERIENCE

Stanford University, Research Fellow

Summer 2019 - Present

• Selected for an undergraduate research fellowship at the **Magnetic Resonance Systems Research Laboratory** (MRSRL) at Stanford Electrical Engineering. Working on developing a novel deep-learning model to identify motion artifacts in pediatric MRI and provide data-informed suggestions to MR technicians.

California Institute of Technology, Teaching Assistant

Summer 2019 - Present

• Selected as a sophomore to serve as a teaching assistant and Dean's Tutor for CS24 for the 2019-2020 school year. Responsibilities include writing assignments, grading, and holding weekly office hours.

Stanford University, Research Intern

Summer 2017 (extended to July 2018)

• Selected for the **2017 Stanford Institutes of Medicine Summer Research Program (SIMR)**. Developed a machine-learning classifier for diagnosing Autism Spectrum Disorder based on a patient's ability to recognize emotions and their measured level of facial engagement. Submitted a paper currently under review at JMIR.

Intel Corporation, Engineering Intern

Summer 2016 (extended to Dec. 2016)

 Built hardware prototypes and developed Android apps to connect to them and demonstrate their functionalities. Used Google's Location API and Bluetooth Low Energy (BLE) wireless communication and gained experience with electrical circuit design, lab equipment, and the Arduino hardware kit.

AWARDS

- Andy Grove Scholarship for Intel Employees' Children Award selected from a group of over 2000 undergraduate applicants.
- Bellarmine College Preparatory Computer Science Award 2 students selected from the student body for excellence in computer science; Bellarmine Matteo Ricci Award 10 students selected for embodying Jesuit ideals and contributing to community inside and outside of the Bellarmine classroom.
- 2-Time Southern California Intercollegiate Athletic Conference (SCIAC) Swimming Championship Finalist in the 100-yd and 200yd Breaststroke; 1-Time SCIAC All-Academic Team Member.
- 2-Time American Invitational Mathematics Exam (AIME) qualifier scored in the top 5% of AMC12 participants nation-wide.
- · National Merit Finalist and Scholarship recipient; National AP Scholar

SKILLS

- Programming languages: Python, Java, C, x86-64 Assembly, PHP, SQL, Mathematica.
- Machine Learning: TensorFlow, Keras, NumPy, sklearn.
- Graphic design and Video Editing: Adobe Illustrator, Photoshop, InDesign.
- Video editing and animation: Adobe Premiere Pro, Adobe After Effects.

OTHER ACTIVITIES & INTERESTS

- Self-built a high-performance desktop PC ordered and assembled parts; stress-tested the finished PC.
- Caltech Admissions Ambassador and Frosh Camp Counselor
 – selected by the Admissions and Deans' Offices to
 serve as an undergraduate representative, leading campus tours and holding office hours for prospective families, as well as
 serving as an orientation leader for incoming Caltech freshmen.
- Caltech Interhouse Athletics Manager organizing and scheduling interhouse sport competitions between the eight undergraduate residential Houses.