ADRIAN ROSS CARRETERO CHAVEZ

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Summary

Highly-achieving high school graduate with 4.63 weighted GPA, 1590 SAT, and AP-level course-work. MIT Class of 2024. Interested in applications of computation to science, especially in the fields of biochemistry and systems biology. Currently performing research in said fields in an internship with Dr. Irina Kufareva at the UCSD Skaggs School of Pharmacy. Multiple years' experience working with computer software and hardware with extensive knowledge of Linux environments.

Education

- **Massachusetts Institute of Technology — Class of 2024** *(Currently on gap year prior to enrollment)*
  - Intended Majors: Course 5-7 (Chemistry & Biology) and Course 6 (EECS)
- **Mater Dei Catholic High School (MDCHS) — Class of 2019**
  - Class Rank (10^{th}-12^{th}) — 1^{st}
  - GPA — 4.63 Weighted, 3.99 Unweighted
  - AP Coursework (Score for all exams: 5) — Environmental Science, Chemistry, Calculus AB & BC, Physics C: Mechanics, Biology, English Literature, US History, US Gov & Politics
- SAT — 1590 (800 Math/790 EBRW) — 99+th Percentile
- SAT Subject Tests— Math II: 800 — Chemistry: 800

Work Experience

- **Research Internship at UCSD Skaggs School of Pharmacy**
  July 2018–August 2018, February 2019–Present
  - Analyzed protein structure using the MolSoft ICM protein modeling suite, implementing a new method of protein binding pocket similarity scoring in ICMScript (Summer 2018)
  - Wrote scripts to validate, process, and visualize Boolean models of cell signaling networks using Python and R (Spring–Summer 2019)
  - Collaborated closely with other lab members (both graduate and undergraduate) through email, text, phone calls, one-on-one meetings, and larger lab-wide meetings
- **IT Internship at Mater Dei Catholic High School**
  August 2017–May 2018, January 2019–May 2019
  - Inventoried, organized, and packaged hundreds pieces of equipment for donation
  - Captured and deployed images for student laptops using FOG Project
  - Saved school $7000 by repurposing discarded student laptop hard drives

Awards and Honors

- National Merit Scholarship Program Finalist
- National Hispanic Recognition Program Scholar
- California Mathematics Council Award
- National AP Scholar
- National Honor Society Member
- Kyoto Prize Scholarship 2019 Semifinalist
- SDSU Big Data Hackathon: 3^{rd} Place (2017), Best Young Geocomputational Thinker (2019)
- 2017-18 San Diego Fencing Open Cup Third Place in Sabre
- MDCHS Presidential Scholarship (Full Ride)
- California Scholarship Federation Member

Interests and Skills

- Bilingual — Native speaker of English and Spanish
- Programming Languages — HTML5, CSS3, JavaScript (Node.js), Python (NumPy), ICMScript, R
  - Able to quickly adapt to new languages through hands-on experience
- Familiar with *nix bash environments (Ubuntu, Debian, Arch, CentOS)
- Hobbies:
  - Hiking and Backpacking — The source of my appreciation for the natural world and its beauty
  - Travel — Have visited countries all over the world and can't wait to see more!