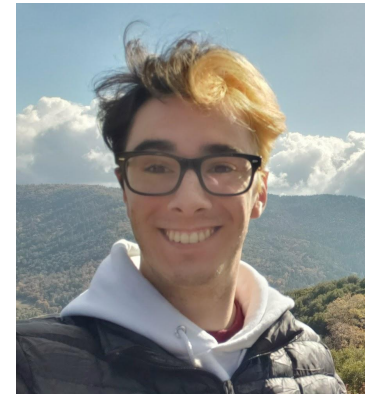



Michael Gutierrez


Astrophysics/Engineering @ Caltech

Greetings! I'm a second-year undergraduate at Caltech. I have a passion for learning how the universe works and pushing the bounds of human achievement. My dream job is one where I can do exactly that — I love to get my hands dirty and dive deep into rabbit holes (figuratively or literally), and I'm not coming back up until I've cleared a path to Wonderland!



 + 1 941-330-4460

 magutier@caltech.edu

 <https://guutz.com>

 <https://www.linkedin.com/in/michaelguutz/>

Experience

3/2022 - Present
Pasadena, CA

Caltech CubeSat Club - Communications Lead

- Prototyping and testing of radio communications for (short term) high-altitude balloon payloads and (long term) orbital CubeSats
- Organize efforts with club leadership to meet launch deadlines
- Mentor junior members (mechanical, electrical, compsci principles)

Summer 2022
Westford, MA

MIT Haystack Observatory - Research Experience for Undergraduates

- Integration and testing for flight models of AERO/VISTA CubeSats
- Developed an open-source codebase to automate operations for Haystack's satellite ground station (radio uplink/downlink)

Summer 2021
Glendale, CA

XOS Trucks - Engineering Intern

- Prototyping and manufacturing design for EV battery packs
- Used CAD and PLM software to develop parts/assemblies
- Run environmental tests on high voltage & structural battery components for integration into vehicles

Education

2021 - 2025
Pasadena, CA

Green = Planned/Currently taking

Caltech - pursuing B.S. in Astrophysics

- Physics coursework: Classical, Quantum, Statistical Mechanics; Electricity + Magnetism; Astronomy instrumentation
- Engineering coursework: CAD Design and Prototype Fabrication; Robotics (Mechanical, Electrical, and Software)
- Other: Computational Mathematics, Storytelling for Scientists

Things that are important to me

Open communication

Collaboration

Work-life balance

Perseverance

Sense of humor

Skills

SOLIDWORKS



Python



GNURadio/DSP



Arduino/C++



CATIA/Fusion 360



CNC Machining



3D Printing



Hobby/RF Electronics

