

# Sebastian Nunez

Nashville, TN | jose.s.nunez@vanderbilt.edu | +1 (629) 259-7102 | linkedin.com/in/sebasnu18

## EDUCATION

**Vanderbilt University**, Nashville, TN.

**Aug 2020 - May 2024**

*Bachelor of Engineering, Mechanical Engineering major*

*Scientific Computing minor*

## RELEVANT SCHOOLWORK BY SPRING 2023

Thermodynamics, Fluid Mechanics, Heat Transfer, Aerospace Propulsion, CFD, FEA, Machine Analysis and Design, Machining Laboratory, Mechatronics, Circuits

## EXPERIENCE

**Vanderbilt Aerospace Design Lab**, Nashville, TN, United States

**Jan 2023 - present**

*Undergraduate Researcher - Vehicle Engineering team*

- Assist in the fabrication & testing phase of a 7x national champion senior-led high-powered rocket team for the NASA Student Launch.

**Advanced Robotics & Control Lab**, Nashville, TN, United States

**Aug 2022 - present**

*Undergraduate Researcher*

- Improve the embedded system of a biped robot by replacing outdated hardware, soldering, and writing a C++/Python program to control the encoders with a Raspberry Pi.

**Latourette & Parini S.A.**, Asuncion, Paraguay

**Jun - Aug 2021**

*Aircraft Maintenance Technician Intern*

- Performed damage diagnosis and maintenance of aircraft engines' structural and mechanical systems. Inspected over 6 reciprocating single- and twin-engine aircraft.

## LEADERSHIP

**VU Motorsports Club**, Nashville, TN, United States

**Aug 2022 - Jan 2023**

*Electrical Lead*

- Manage the electrical components of Vanderbilt's Formula SAE team.
- Create a digital schematic of the car's electric circuitry & assemble body panels.

**VU Satellite Club**, Nashville, TN

**Aug 2022 - Jan 2023**

*PR Director*

- Manage the club's social media and official communications.
- Created the schematics and PCB design of the flight computer of a high-altitude balloon involving sensors, power supply, clock, and ATmega328PB microcontroller with KiCad.
- Created a standard launch procedure for our high-altitude balloons.

**Association of Latin American Students**, Nashville, TN, United States

**Aug 2021 - 2022**

*Social & Recruitment Chair*

- Created a mentoring program for more than 30 Latin American students.
- Led bi-weekly general body meetings with over 100 people and a budget of around \$1000.

**Prendete**, Asuncion, Paraguay

**Jan - Dec 2017**

*Co-founder*

- Co-created an online database of academic opportunities for Paraguayan students.
- Developed a sustainable & scalable business model after attending a three-month incubator program at the National University of Asunción.

## PRIZES

**Latin American Astronomy and Astronautics Olympiad**

**2016 - 2017**

*by International Olympiad Committee*

- Gold medal in an international competition that tests skills in astrometry, astrophysics, and rocketry among over 50 students from more than 11 countries.

**PROtagonistas Prize**, Paraguay

**2018**

*by Secretaria Nacional de la Juventud del Paraguay*

- Recognized by the government as one of the 30 youth leaders in Paraguay for contributing to STEM outreach among high school students.

## SKILLS

Proficiency in: MATLAB, SolidWorks, Arduino, KiCad, LabView, Mathematica, Microsoft Office 365 (Excel, Word, PowerPoint), Google tools, Canva, and Adobe Acrobat. Fluent in Spanish and English, proficient in Portuguese.