Andres Perez

Long Beach, Ca | 562.333.5244 | aperez26@nd.edu | reaper3629.github.io | linkedin.com/in/andres-perez0

Experience

High School Tutor — Carson, CA

Long Beach Unified School District · Part-Time — Sep. 2022- May 2023; Aug. 2023 - May 2024

- Fostered academic pedagogy among my peers.
- Coordinated group and one-on-one learning to ensure comprehension, collaboration, and a sense of community.
- Tutored subjects: Geometry, Algebra 2, AP Pre-Calculus, AP Calculus AB & BC, AP Physics 1, AP Computer Science Principles, Computer Science Essentials, and Japanese.

Electrical Subteam — Carson, CA

Ailurus Industries · California Academy of Math and Science — Aug. 2023 - Jun. 2024

- Collaborated with a team of 30+ students to design, manufacture, and construct modular robots to assemble and disassemble into multiple configurations to retrieve an artifact.
- Innovated upon UPenn's SMORES-EP cubic design utilizing an ESP32-UWB microcontroller for a trilateration algorithm.
- Practiced NASA soldering specifications practices to design physical body and electrical diagrams for the modular robots, while remaining in a 3-inch cube-size restraint for each module.

VEX Captain — Carson, CA

California Academy of Math and Science · Long Beach Unified School District — Aug. 2021 - Oct. 2023

- Directed a team of 12 Juniors and Seniors toward the creation of a State-Level competition robot.
- Outlined points of discussion and held team interviews for review and possible improvements.
- Utilized Fusion 360 to design, animate, and analyze robotics assemblies.
- Initialized communications with a local high school VEX robotics team to co-host competitions at their location and participate in shared scrimmages.

Lemelson-MIT InventTeam — Palos Verdes, CA

Mechanical Team · Rolling Robots — Aug. 2022 - Nov. 2023

- Collaborated with a team of 15 students to brainstorm, draft, and write a proposal that was one of ten teams to win a $7500 grant. Specialized in the larger city and tourist areas of my hometown.
- Employed Fusion 360 design and stress tests the walker components (i.e. walker frame, seat, and handles).
- Implemented iterative design for rapid prototyping for our invention, the Smart Walker, and prepared the walker to be present at the Lemelson-MIT EurekaFest 2023.

Projects

Portfolio Website - reaper3629.github.io — July 2024-Present

- Developing a portfolio website with Astro and Tailwind CSS frameworks as the frontend

Technical Skills

Programming: C++, Python, Java, HTML, CSS, Git
Computer-Aided Software: Fusion360
Language: English (Full professional proficiency); Spanish (Native or bilingual proficiency); Japanese (Elementary proficiency)
Miscellaneous: Soldering

Academics

University of Notre Dame — Notre Dame, IN

Bachelor of Science in Computer Engineering — Aug. 2024 - May 2028

California Academy of Math and Science — Carson, CA

High School Diploma, Engineering and Computer Science Pathway — Aug. 2020 - Jun. 2024

GPA: 4.38

Activities and Awards: Questbridge National Match Finalist; Student Tutor; Lemelson-MIT InvenTeam Grant; AP Scholar with Distinction; VEX Robotics Club (Captain); Boys Volleyball (Varsity, Co-Captain[11th]); Cross Country (Varsity[10th]);

Long Beach City College — Long Beach, CA

Dual Enrollment, Computer Science — Jun. 2022 - Jun. 2024

GPA: 3.91

Relevant Coursework: Multivariable Calculus, Data Structures and Algorithms, Adv. Computer Science - C++, Intro. To Computer Science - C++, Critical Thinking, and Intro. To Existentialism

Compton College — Compton College, CA

Dual Enrollment, Engineering — Jun. 2022 - Jun. 2024

GPA: 4.00

Relevant Coursework: Differential Equations with Linear Algebra, Engineering Design and Development