Gregorio Zaltzman D' Ambrosio

Barcelona, Spain • gzaltzman@ucsd.edu • +1 858-203-8489 • gregoriozaltzman.com

Education

University of California, San Diego, Bachelor of Science in Aerospace Engineering, GPA: 3.2 *(Sep 2022 - Present)*

Relevant Coursework: Fluid Dynamics, Solid Mechanics, Statics & Dynamics, Thermodynamics, Heat exchange, Ordinary Differential Equations, Numerical Methods, Aerospace Structures, Propulsion, Signals and Systems, Linear Control, Aerodynamics, Aerospace Controls, Orbital Mechanics, Engineering Experimental Techniques

British School of Paris A-levels: *A** Math, *A* Physics, *A* Drama, *A** EPQ, GCSE Scholar, SAT: M:780 E: 660 Dec 2022

Duke of Edinburgh - Gold Award, Academic Prefect, Red Cross Volunteer

Skills

Programming: MATLAB, Python, Arduino IDE

Design: SolidWorks, SolidWorks FLOW, Fusion 360, STK, FEA, XFLR5, Open VSP, AVL

Languages: English, Spanish, French (All fluent)

Soft Skills: Collaboration, Problem-solving, Teamwork, Analytical Thinking, Communication

Projects

Senior Design Project – Ultra-Fuel-Efficient Commercial Aircraft Concept

Leading the design of a next-generation blended wing body commercial airliner, performing aerodynamic configuration trade studies, wing loading and sizing analysis, drag build-up, propulsion integration, thrust and wing loading estimation, mission performance analysis (range, climb, cruise), and stability and control considerations under operational constraints.

Wing Spar Analysis Project

Developed a MATLAB program to analyze single-cell wing bending, torsion, and shear for a 4-stringer wing with uniform skin under concentrated and distributed loads.

Low-Speed Aircraft Aerodynamics Workflow (XFLR5, OpenVSP, AVL) *In Progress*

Executed an end-to-end aerodynamics workflow using XFLR5, OpenVSP, and AVL to perform airfoil selection, conceptual aircraft modeling, and static stability analysis for a low-speed aircraft.

SolidWorks Flow Airfoil Aerodynamic Analysis *In Progress*

Conducted CFD aerodynamic analysis of a low-speed airfoil using SolidWorks Flow Simulation to evaluate lift, drag, and flow separation across varying angles of attack.

Work Experience

DBF @ UC San Diego - *Aerodynamics & Structures* subteams San Diego, September 2025 - Present

Collaborated on the Structures and Aerodynamics teams in Design Build Fly, applying structural analysis and aerodynamic principles to design, analyze, and optimize a competition aircraft.

UC San Diego ITS - *Service Desk Lead Technician* San Diego, September 2023 - Present

Led a team of 60 + team members by supporting and maintaining a positive, collaborative work environment. Oversee daily Service Desk operations, including complex technical support, workflow coordination, upkeeping documentation, and extensive communication with other departments. Also contributed to long-term team growth through training, hiring support, project work, and improving processes and resources for the Service Desk.

I.R.S.N. - *Shadow Intern* Paris, France, February 2022

Learned about logistics and operations. Learned about the manufacturing and distribution of dosimeters

Taught how the I.R.S.N. tackles risk and risk management, including how they detect and analyze radioisotopes

C2N @ CNRS - *Shadow Intern* Paris, France, August 2022

Analysed nanophotonic crystals and nanolasers made using nanocavities, learned about experimental procedures in a clean room, such as the creation of nanolasers, and the operation of an electron microscope. Networked with a quantum computing startup that was developing and manufacturing quantum computers

Leadership

Social Chair, PR chair — *Phi Gamma Delta at UC San Diego*

Organized 20+ inter-organization events annually, strengthening campus partnerships.

Developed promotional materials and communication strategies that increased recruitment engagement.

International Student Society— *Event Coordinator & Recruitment Chair*

Mentored 50+ international students, organized community events, and revamped the club membership pipeline

Duke of Edinburgh Gold Award – *British School of Paris*

Completed the Duke of Edinburgh Gold Award, demonstrating sustained leadership, resilience, and teamwork through year-long volunteering, skill development, physical training, and multi-day expeditions.