Alba Garcia-Sarabia

(786)-719-3929 | albagsgt@gmail.com | Miami, FL | https://a-garcias.github.io/

Education

Georgia Institute of Technology | Atlanta, GA — *July 2022 – May 2026*
Bachelor of Science in Mechanical Engineering, GPA 3.77 — *Faculty Honors,*
International Plan — *Dean's List*

Universidad Pontificia de Comillas – ICAI | Madrid, Spain — *Spring 2025*
ICAI Study Abroad Program for International ENgineering Students (SAPIENS) Exchange

University of Oxford | Oxford, UK — *Fall 2022*
First Year Semester Abroad Georgia Tech Program

Projects

ME 2110 Creative Decisions & Design Team Design Competition | Solidworks, Arduino, C++ — *Spring 2024*
- Collaboratively designed and built a task-completing robot using Solidworks and mechatronics integration.
- Implemented C++ sensor communication on Arduino Uno to enable autonomous operation within time constraints.
- Presented design rationale, CAD renderings, and performance analysis to faculty and industry evaluators.

ME 2016 Computing Techniques | MATLAB — *Fall 2023*
- Utilized various Numerical Methods to optimize conditions and create models for a hypothetical suspension system.
- Given design parameters and specifications, compared the output of analytical, linear and non-linear mass-spring-damper systems at different frequencies and tested convergence.

ME 1670 Engineering Graphics and Design Individual Project | Solidworks, 3D Printing — *Spring 2023*
- Produced multi-view and sectional CAD drawings, thumbnail sketches, and assemblies both by hand and via CAD.
- Considered GD&T and fit parameters when 3D printing end result.

Experience

Georgia Institute of Technology — *March 2024 – Present*
Woodruff School of Mechanical Engineering Communications Student Assistant — Atlanta, GA
- Support digital communications, including website and social media, and assist with technical event coverage.

Georgia Institute of Technology — *August 2025 –Present*
Undergraduate Research Assistant, IDREEM Lab — Atlanta, GA
- Analyzed SolidWorks design strategies (parallel vs. iterative) to quantify effects on design space exploration.
- Evaluated performance and self-efficacy data to identify correlations between design approach and outcomes.

Actor's Playhouse — *April 2021 – June 2022*
Box Office Representative — Miami, FL
- Responsible for sales, client services, account maintenance, and assisting theater preparation for productions.

Organizations

EcoCAR | Georgia Tech | *Communications Team Member* — *November 2023 – December 2024*
- Helped connect with government officials, write blog posts and features, post on social medias and coordinate and plan community outreach events.

Society of Women Engineers | Georgia Tech — *August 2023 – Present*
- Attended weekly meetings and participated in community outreach.

Solar Racing | Georgia Tech | *Suspension Team Member* — *January 2023 – December 2023*
- Collaboratively designed Rear Suspension Cylinder to prevent wheel motion beyond the z-plane.

Skills

Programming Languages: MATLAB, Python, C++ (basic)
Languages: English (native), Spanish (bilingual)
Technologies: Solidworks, Theater Manager (software for theater productions), Word, Excel, and PowerPoint
Machine Learning: Model Design, Feature Engineering, Model Validation, Data Analysis, Design of Experiments
Soft Skills: Analytical problem-solving, cross-functional collaboration