Liu Restrepo Sanabria

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EDUCATION

Trinity College Aug 2023 – Expected May 2027
Bachelor of Science, Electrical Engineering and Computer Science *Hartford, CT, USA*

- **GPA:** 4.075/4.00
- **Scholarship:** Davis Scholarship (160,000 USD) recipient.
- **Honours:** Faculty Honours Fall 23 and 24, Spring 24; Physics Prize 2024.

Mahindra United World College of India (MUWCI) Aug 2021 – May 2023
International Baccalaureate Diploma Programme (IBDP) *Pune, MH, India*

- Dare to Dream Scholarship (74,000 USD) recipient to complete the IBDP at one of the 18 United World Colleges.
- Extended Essay on Physics: Is the quality factor the most optimal way to quantify the 'quality' of a band-pass active filter in terms of its similarity to the ideal model of a band-pass filter or is it the attenuation rate? (Grade: A)

EXPERIENCE

IT Desk General Consultant Feb 2024 – Current
Raether Library at Trinity College *Hartford, CT, USA*

- Troubleshoot tech-related issues for students, staff, and faculty members, resolve multiple problems on the Halo ITSM ticketing system, and implement Salto Systems for access control on campus.
- Guide library patrons in accessing a vast collection of 900,000+ resources.
- Manage and maintain multi-factor authentication (MFA) using Microsoft Azure.

Software Designer May 2022 – March 2023
Brosty Pollo y Algo + Ccs *Medellin, Antioquia, Colombia*

- Designed and developed a phone application for data management using the Kivy framework in Python and MySQL.
- Increased the sales profit by 7% due to better management and planning utilising the application.

Hardware Design Intern Aug 2020 – July 2021
Mahroy *Caracas, Distrito Capital, Venezuela*

- Designed and implemented a new vending machine system using a PIC18F77A and Assembly language.
- Helped design and implement an automatic conveyor belt system for garment sorting using an ESP32 and integrated IR sensors and load cells for accurate and efficient sorting of garments. Developed embedded C/C++ and Python code to control the motors' positions and velocities with a PID algorithm.

PROJECTS

MOSPRO LIV Jan 2021 – Apr 2021
Capstone Project for Technician Degree in Electronics *Caracas, Distrito Capital, Venezuela*

- Electric car prototype driven by a phone application developed with MIT App Inventor.
- Arduino Uno system with an HC-05 Bluetooth module and H-bridges (using 2N3904 transistors and 1N14007 diodes.) Employed PWM for motor control. General control programmed with C++.

TECHNICAL SKILLS

- **Languages:** Python, Java, HTML, CSS, LaTeX, VHDL & SQL. Beginner: C, C++ & Assembly.
- **Tools, Frameworks, and others:** Visual Studio Code, Kivy, Matplotlib, Overleaf, Pandas, NumPy & SciKit Learn.

Last Modified: January 28, 2025