

EDUCATION

Georgia Institute of Technology, Atlanta, Georgia
Bachelor of Science in Computer Science

August 2027
GPA: 3.76/4.00

Universidad Metropolitana (Unimet), Caracas, Venezuela
Cambridge International School, Dubai, UAE

Sep 2023 – Jul 2023
Aug 2020– Jul 2023

Relevant Coursework: Data Structures and Algorithms, Intro to Object Oriented Programming, Discrete Mathematics, Differential Calculus, Integral Calculus, Linear Algebra, Modern Physics

PROGRAMMING SKILLS

Proficient in *Python, Java, C, HTML/CSS, Javascript, Numpy, Pandas, PyQt Streamlit, Docker, Jupyter, Altium, Autocad, Microsoft Office*

WORK EXPERIENCE

Student Assistant, Office of Undergraduate Admissions, Atlanta, Georgia

Ongoing

- Manage and respond to 100+ emails, events calendar and decision release questions for the Georgia Institute of Technology, ensuring student and parent satisfaction
- Research and respond to each question with accuracy and precision and organize received official and confidential student documents and transcripts

Teacher/Professor Assistant for Discrete Mathematics, Caracas, Venezuela

Apr 2024 – Jul 2024

- Recognized for clear and systematic teaching at ‘La Universidad Metropolitana’, supporting 40+ students in understanding complex topics in Discrete Mathematics through 1.5-hour classes
- Developed 10+ hours of weekly guides and theory lessons, noted as exceptionally comprehensive by students, though actively simplifying to maximize clarity

Undergraduate Research Assistant, Caracas, Venezuela

Jan 2024 – Jul 2024

- Conducted pioneering research on solar cookers implementation in Venezuela, recognized by the engineering department and supported by multiple professors, leading to its integration as a final project for students in Thermodynamics 1
- Analyzed materials, semiconductors, and ideal operational conditions, contributing to the foundation for Venezuela's first large-scale solar cooker implementation for rural areas, currently being further researched at the university
- Shared findings at university's open conference, leading to future collaboration opportunities with 200+ engineers and industry leaders

Engineering Intern/Researcher/Evaluator, Dubai, UAE

Apr 2022 – Sep 2022

- Researched 10+ refrigeration systems, detailing specifications for cold storage units (e.g., chiller evaporators, dual discharge coolers, compressor racks), providing data that secured 5+ project approvals across the Middle East
- Delivered precise component specifications (voltage, size, power) using Digikey resources, supporting accurate financial projections and material requirements
- Independently created AutoCAD models for 10+ land areas, coordinating with tens of senior and junior engineers on and off site to facilitate project planning

TECHNICAL APPLICATIONS

Frontend Developer

Feb 2025

- Built InsureLink, an AI-driven healthcare web app streamlining health insurance recommendations tailored to users' chronic conditions, budgets, and coverage needs
- Developed the frontend with Streamlit, ensuring a responsive and intuitive user interface and engineered the backend leveraging Google's Gemini LLM
- Integrated structured data from the HealthCare.gov Georgia insurance dataset, enabling dynamic, data-driven outputs

Frontend Developer

Oct 2024

- Developed a medical triaging appointment booking system during Georgia Tech's collegiate hackathon under the data analytics track, that utilizes trained AI models; medical and patient interface using Javascript, HTML and CSS across 36+ hours, connected with Multipurpose Internet Mail Extensions (MIME) to send patient email confirmations
- Integrated backend AI trained models on various patient symptoms and their urgency; used TensorFlow, tokenizer, Streamlit, and python pandas and NumPy; made frontend connection using Flask

AI/ML Developer

Oct 2024

- Engineered an AI-driven novel-reading app at UC Berkeley's hackathon that narrates books in character-specific voices, leveraging machine learning to analyze traits, LLMs for context, and DeepGram for text-to-speech, with interactive user features to converse with characters in their unique voices
- Optimized the user experience with real-time text highlighting using PyQt and FastAPI endpoints, overcoming challenges in character voice training and speech synthesis

LEADERSHIP AND COMMUNITY ENGAGEMENT

Partnership Director at Startup Exchange, Georgia Tech

Ongoing

- Connecting student entrepreneurs with industry resources, mentors, and funding opportunities by developing strategic partnerships that support innovation and startup growth on campus.
- Securing sponsorships and collaborations with top-tier companies including NVIDIA and Truist.

Lead Researcher at Data Science Club & Quantum Computing Association, Georgia Tech

Ongoing

- Spearhead research on quantum annealing techniques, developing novel problem formulations to leverage quantum annealers for efficient and effective solutions
- Develop quantum error correction utilizing Steane code to generalize error correction using Python, IBM's Qiskit

GT Experimental Rocketry, Georgia Tech

Ongoing

- Develop the avionics radio board as part of the flight system for an experimental rocket, enabling robust GPS, telemetry, and RF communication
- Contributed to debugging and simulations to optimize telemetry via C language integration on the HAL board and MCU; results from the last launch achieved 1600m altitude and uninterrupted GPS coverage—exceeding initial targets by 150%

