

# George I. Habashi

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## PROFESSIONAL SUMMARY

Passionate about bridging software engineering with real-world hardware applications, and determinant in finding motivating opportunities in software development, full-stack development, 3D Modeling, Aeronautics and Automotive Technologies.

## EDUCATION

- **Bachelor of Science in Computer Science**, Minor in Software Senior Sequence  
University of Houston | Expected Graduation: December 2025
- **Relevant Coursework:** Data Structures, Object-Oriented Programming, Web Development, Mobile Application Development, Database Management, Algorithms, Embedded Systems with Arduino, AI Fundamentals

## EXPERIENCE

### - SW intern (CubeSat-I) | EgSA (Egyptian Space Agency):

- Collaborated on software design for low-cost CubeSats (1U–6U) deployed via weather balloons.
- Developed Python and C++ software for data acquisition (surface imaging) and implemented magnetorquer control for satellite orientation.
- Demonstrated teamwork, problem-solving, and system simulation under real-world constraints.

Fall, 2022 | EgSA, Cairo, Egypt.

### - Research Assistant | Prof. Zhigang Deng, Department of Computer Science, UH

#### + Analysis and Modeling of Human Behaviors in Multiparty Conversations: -

- Assisting in modeling and predicting human conversational behavior using 3D motion capture and AI.
- Analyzing multimodal motion data to develop a real-time next-speaker prediction algorithm.

August 2025 - Current

### - Full-Stack Web Development | Archangel Raphael Coptic Orthodox Church

- Developed and managed an online portal for Sunday school students and servants with role-based access in our church.
- Programmed secure user authentication, grade-specific quizzes, lessons, and videos using PHP, MySQL, HTML, CSS, and JavaScript.
- Integrated database-driven lesson management to improve accessibility and content delivery.

June 2025 - Current | Test link: <http://aar-sds.atwebpages.com>

### - Research Assistant | Prof. Dr. Gehad Ismail, Department of Computer Science, CIC

#### + SW Design, QuantaMedics (Medical-AI Research) | Graduation Project: -

- Utilized Quantum Convolutional Neural Networks (QCNN) with TensorFlow to classify fMRI brain scans for autism detection using the ABIDE II dataset.
- Achieved over 90% detection accuracy by integrating quantum computing techniques into the model.
- Documented and validated findings for academic submission.

Fall 2023 | CIC University (New Cairo Campus), Egypt.

### - Android SDK Development | Team Project

- Designed and developed "Diet Trak," a B2C mock health-tracking Android app using Kotlin, Java, and Firebase.
- Implemented secure user authentication via Google and Facebook APIs.
- Streamlined diet recommendations through data-driven algorithms and responsive UI design.

Summer 2022 | Cairo, Egypt.

### - Cashier | Whataburger | 18190 Gulf Fwy, Friendswood, TX 77546

- Balanced full-time overnight shifts with a full-time academic schedule.
- Demonstrated teamwork, adaptability, and reliability under fast-paced conditions.

Mar 2023 – Nov 2024

## TECHNICAL SKILLS

- **Programming Languages:**  
C++, C, Java, Python, JavaScript, Kotlin, MATLAB, CSS, Firebase

- **Tools & Platforms:** Android SDK, Visual Studio, AutoCAD, WordPress, TINA TI, Blender, Microsoft Office

## EXTRACURRICULARS

+ **Church Technical Service:**  
Designed and managed the church's web database system for Sunday school.

+ **Hobbies:** Story writing, model airplane design, and flight dynamics research.

+ **Languages:** English (Fluent), Arabic (Fluent), French (Basic)

## Interests

- **Arduino-Based C++ Vehicle Dashboard Telemetry | EVER IV (Electric Formula Student in Egypt)**

+ Programmed a real-time dashboard for an electric race car using Arduino HW  
+ Integrated speed, RPM, and BMS data to provide effective driver feedback

- **Aerodynamic Design | EVER IV**

+ Utilized Ansys (AutoCAD & MATLAB) to design and test the fiberglass body for the vehicle, targeting a Cd. Of 3.0, we achieved an improvement over the previous year's design, and we achieved a Cd. Of 2.8

- **Cougar Racing | University of Houston**

Participating member contributing to vehicle system integration, telemetry data acquisition, and hardware-software synchronization.