George I. Habashi

Summary
Passionate about bridging software engineering with real-world hardware applications such as telemetry and performance diagnostics. Determination in motivating opportunities in software development, full-stack development, embedded systems, and automotive technologies.

Education
- **Bachelor of Science in Computer Science, Capstone: 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.

- **Undergraduate 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

- **Student Enrichment Program (SEP) Scholarship | College of Natural Sciences & Mathematics (UH)**
  - SEP/H-LSAMP Scholarship, Position: SEP Office Aid, participated in 4 professional development events Fall 2023 – Spring 2023

- **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

- **SW Design, QuantaMedics (Medical-AI Research) | Graduation Project (CIC University)**
  - 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.

March 2023 – November 2024

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

Extracellular
+ 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)
+ **College Clubs:** Orthodox Campus Christian Ministries (OCCM - UH), Cougar Racing (UH), EVER (Egypt), CougarAI (UH), CougarCS(UH) and Robotics@UH

+ **Arduino-Based C++ Vehicle Dashboard Telemetry and Aerodynamic analysis| 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
  - 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.

References
- Professor Zhigang Deng | Computer Science Department – UH | Office PHG 228 | (713) 743-1018 | zhigang.deng@gmail.com
- Eduardo Cerna | Program Director, Scholar Enrichment Program NSM – UH | Office (713) 743-1750 | ecerna@central.uh.edu

GeorgeIhab2@gmail.com | US Permanent Resident | http://www.linkedin.com/in/george-habashi | https://georgeihab2.github.io/portofolio/