GEORGE I. HABASHI

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Career Summary: Entry-level to mid-level software and systems engineering candidate with experience spanning embedded systems, full-stack web development, data acquisition, and technical support environments. Brings hands-on skills in C++, Python, Java, Kotlin, PHP, and SQL, along with practical exposure to hardware–software integration through CubeSat software development, Arduino-based telemetry projects, and university-level research in human-behavior modeling using AI. Adept at building secure web platforms, developing mobile applications, and contributing to real-time system simulations. Demonstrates reliability, strong problem-solving abilities, and the capacity to perform under fast-paced or high-pressure conditions, supported by experience balancing demanding academic and customer-facing roles. Committed to delivering high-quality technical solutions while collaborating effectively within multidisciplinary teams.

TECHNICAL SKILLS

Programming: C++, C, Java, Python, JavaScript, Kotlin, MATLAB, CSS, PHP, SQL
Tools & Platforms: Android SDK, Firebase, Visual Studio, AutoCAD, TINA TI, Blender, Arduino, WordPress, Linux, Git/GitHub
Technical Strengths: Embedded Systems, Full-Stack Web Development, Telemetry Systems, Hardware Diagnostics, Data Acquisition, Algorithms, AI/ML Fundamentals, Customer Technical Support

PROFESSIONAL EXPERIENCE

Egyptian Space Agency (EgSA)   **Fall 2022**
Software Intern | CubeSat-I Program   **Cairo, Egypt**
- Supported the software design of low-cost CubeSat systems (1U–6U) prepared for weather-balloon deployment.
- Developed Python and C++ code used for data-acquisition workflows, including surface-imaging tasks.
- Implemented magnetorquer control algorithms to assist with CubeSat orientation and attitude stabilization.
- Performed testing and verification of software modules to ensure functionality under real-world conditions.
- Assisted with simulation activities used to model CubeSat behavior prior to deployment.

University of Houston \Department of Computer Science   **August 2025 – Present**
Undergraduate Research Assistant (Human Behavior Modeling Lab), Houston, TX
- Assisted in research focused on modeling and predicting human conversational behavior using 3D motion-capture data and AI-based analytical techniques.
- Analyzed multimodal motion datasets to support the development of a real-time next-speaker prediction algorithm.
- Contributed to preprocessing, labeling, and organizing large motion-capture datasets used in conversation-behavior modeling.
- Supported the design and evaluation of algorithmic approaches for recognizing interaction cues in multiparty conversations.
- Conducted exploratory data analysis to identify patterns in gesture, movement, and conversational dynamics.

College of Natural Sciences & Mathematics, University of Houston   **Fall 2023 – Spring 2023**
SEP Office Aide (SEP / H-LSAMP Scholarship Program)   **Houston, Texas**
- Provided administrative support within the Scholar Enrichment Program (SEP), assisting staff with day-to-day office tasks and student coordination.
- Helped maintain organized records and documents for scholarship and academic support activities.
- Supported SEP operations by answering student inquiries and directing participants to appropriate program resources.
- Assisted with scheduling and logistics for SEP-related activities and events as required.
- Participated in four professional-development events as part of the H-LSAMP scholarship requirements, strengthening academic and career-readiness skills.

Archangel Raphael Coptic Orthodox Church   **, June 2025 – Present**
Full-Stack Web Developer
- Developed and maintained a role-based online portal serving Sunday school students and instructors.
- Built core features using PHP, MySQL, HTML, CSS, and JavaScript to support lessons, quizzes, and media access.
- Created secure user-authentication workflows to control access for different user groups.
- Integrated a database-driven lesson management system to streamline content updates and improve accessibility.
- Troubleshot website issues, optimized functionality, and ensured smooth operation for active users.

QuantaMedics (Medical-AI Research)   **Fall 2023**
Software Design\ Graduation Project
- Implemented Quantum Convolutional Neural Network (QCNN) models using TensorFlow to classify fMRI brain scans.
- Worked with the ABIDE II dataset to support research on autism detection through medical-imaging analysis.
- Trained and evaluated QCNN models, contributing to detection accuracy reported at over 90% during project testing.
- Conducted preprocessing and data-handling tasks to prepare large neuroimaging datasets for machine-learning workflows.

Team Project (Academic/Collaborative)   **Summer 2022**
Android SDK Developer   **Cairo, Egypt,**
- Designed and developed Diet Trak, a mock B2C health-tracking Android application using Kotlin, Java, and Firebase.
- Implemented secure user-authentication flows using Google and Facebook APIs to support reliable sign-in.
- Built responsive UI components following Android design principles to improve ease of navigation and user experience.
- Integrated real-time data handling with Firebase to support user profiles and diet-tracking functionality.

Whataburger   **March 2023 – November 2024**
Cashier   **18190 Gulf Fwy, Friendswood, TX 77546**
- Provided front-line customer service by accurately processing orders and handling cash and POS transactions.
- Maintained speed and accuracy during high-volume overnight shifts while balancing a full-time academic schedule.
- Demonstrated teamwork and clear communication to support smooth store operations during peak hours. Resolved customer inquiries and issues professionally, ensuring a positive service experience.
- Assisted with security and remote-access initiatives, including SOPHOS laptop encryption deployment and VPN client installation on employee laptops to strengthen data protection and secure remote connectivity.

EXTRACURRICULAR & LEADERSHIP

Church Technical Service: Designed and maintained a web-based Sunday school portal.
College Clubs: OCCM-UH, Cougar Racing, CougarAI, CougarCS, Robotics@UH, EVER (Egypt).
Hobbies: Story writing, aircraft model design, flight-dynamics research.
Languages: English (Fluent), Arabic (Fluent), French (Basic)

EDUCATION

University of Houston   **December 2025**
Bachelor of Science in Computer Science, **Houston, TX**
Capstone: Software Engineering Senior Sequence
Relevant Coursework: Data Structures, Object-Oriented Programming, Algorithms, Web Development, Mobile Application Development, Database Management, Embedded Systems (Arduino), AI Fundamentals.

References Available Upon Request