

Shaliah Fricas

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EDUCATION

University of Massachusetts, Boston | Boston, MA

Expected Graduation: May 2027

B.S. - Computer Engineering | Minor in Computer Science

Cumulative GPA: 3.5

Undergraduate Researcher - UCaN Lab | (Advisor: Prof. Rahaim) | UMass Boston

September 2025 - Present

- I research next-gen wireless systems, including RF/optical hybrid communications, indoor localization, and SDR-based signal processing. I work directly with real hardware, live data collection, and machine-learning approaches for wireless performance and reliability.

Coursework: Python, Data Structures & Algorithms, Programming in C++, Circuit Analysis, Calculus 1-3, Honors Applied AI, Engineering Design, Discrete Math, Linear Algebra, Digital Systems, Physics

Certifications & Programs:

- Apple Certification, AI Agent Foundations, Agentic AI for Business, Multi-Tier AI Agent Architecture
- Oxford Saïd Business School Artificial Intelligence Programme Alumni

Extracurricular Activities:

- Research, Engineering & Robotics Club, Gaming Club, and Growing Women in Science

SKILLS & TECHNICAL TOOLS

Skills: MRI Analysis, Digital/Analog Circuits, ML, C++, Python, MATLAB, OWC/Li-Fi, IT Troubleshooting, PC building

Technologies: VS Code, Raspberry Pi, Matplotlib, CAD, Arduinos, Oscilloscopes, LLMs

Languages: English (Primary) | Spanish (Fluent; Reading & Writing)

EXPERIENCE

Operations and App Development Intern | Arka HR

June 2023 - December 2024

- Solving problems, improving public access to HR resources, enhancing data accuracy, and project timelines.
- Applying technical knowledge to design and maintain automated processes to significantly reduce manual tasks and increase team productivity.

Certified Apple Computing Advisor | Best Buy

August 2023 - January 2025

- Diagnosing and solving system failures, component malfunctions, and software issues for optimal performance.

AI Agent Builder Intern | NeuralSeek

August 2025 - September 2025

- Working with a team to design and deploy generative AI agents that address real-world challenges for industries like HR, Healthcare, and Business.

ENGINEERING PROJECTS

AFRL/ HyLo SDR Research Project | SDR, MATLAB, Python, RF, OWC, Raspberry Pi | *In Progress* | [Link](#)

- Developing a hybrid indoor localization system that combines RF fingerprinting with optical wireless communication (OWC/VLP) to improve accuracy in environments where GPS fails. Also using a full SDR-based testbed, automated data collection, and Machine Learning for predictions.

MediSeek (Biomedical AI Troubleshooting Agent) | AI Agent Editor, Generative AI | [Link](#)

- Designed and deployed an AI-powered troubleshooting agent that supports biomedical engineers and healthcare professionals in diagnosing medical device faults (ex: infusion pumps, patient monitors), improving response time and reliability in clinical environments.

Arduino Calculator | Arduino IDE, C++ , CAD, breadboard/circuits | [Link](#)

- A calculator built using 3D printing and Arduino IDE that can calculate positive integers in two number bases, binary and decimal.

Smart Medication Reminder Device | ESP32, Circuits, Embedded C++ | *In Progress*

- Creating an ESP32-based device that uses a buzzer, LEDs, buttons, and an OLED screen to remind users when a dose is due by using timed logic and confirmation flow, so the device can show alerts, keep track, and show the next reminder.