#### WASSIM MRAD

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#### **PROFILE**

Dedicated Mechatronics Engineering graduate from Rafik Hariri University (RHU) with automation internship experience at Sibline. Strong background in mechanical, electrical, and software integration. Skilled in designing, analysing, and troubleshooting mechatronic systems. Analytical, adaptable, and effective under pressure with excellent teamwork and communication skills.

#### **EDUCATION**

Rafik Hariri University (RHU) — B.E. in Mechatronics Engineering (2021 – 2025) Rajaa College — L.S. Degree (2019 – 2020)

#### **EXPERIENCE**

Automation Intern — Sibline, Lebanon (June 2024 – August 2024)

- Programmed and troubleshot Allen-Bradley PLCs using ladder logic.
- Diagnosed and improved automated production line systems.
- Collaborated with engineers to implement and test automation solutions.

## **PROJECTS**

## Remote-Controlled Rescue Boat (Senior Project, 2025)

- Designed and built a remote-controlled boat for rescue operations.
- Integrated wireless communication, motorized propulsion, and waterproof systems.
- Focused on stability, load-carrying capacity, and emergency response reliability.

## **Smart Home Automation (Spring 2025)**

- Simulated an automated smart home using ROS.
- Automated heating, alarms, lighting, and security systems.

# **Rope-Climbing Robot (Spring 2024)**

 Designed a robot to move along a rope using a suspension mechanism (SolidWorks, Arduino).

### **Line-Following Robot (Spring 2022)**

 Developed an obstacle-avoiding robot using infrared sensors and Arduinobased control.

## **Motorized Generator Switch (Fall 2023)**

Created a sensor-based, automated generator switch control system.

# Hydraulic Crane (Fall 2025)

 Built a hydraulic crane capable of lifting 0.5KG loads using fluid power principles.

### **SKILLS**

- Software/CAD: AutoCAD, SolidWorks, MATLAB, Proteus, LabVIEW, Quartus Prime
- **Programming:** C++, Python, Arduino IDE
- Automation: PLC (Allen-Bradley), ROS, Microcontrollers
- Other: Microsoft Office (Word, Excel, PowerPoint)

### **LANGUAGES**

• English (Fluent) | Arabic (Fluent)

#### **EXTRACURRICULAR ACTIVITIES**

- Member, American Society of Mechanical Engineers (ASME)
- RHU Chess Club Competitor
- RHU Al Club Al Automation Projects
- RHU First Aid Club Emergency Response Training