

Karen Soboh

Karinsoboh2000@hotmail.com | +961-76-317633 | [linkedin.com/in/karin-soboh-bbb3b6316](https://www.linkedin.com/in/karin-soboh-bbb3b6316)

EDUCATION

BE in Biomedical Engineering at Beirut Arab University (BAU), Lebanon

August 2020 – May 2024

- GPA 3.26/4.00
- **Relevant Courses:** Biomedical Instrumentation, Biomedical Sensors, Biomedical Image Processing, Machine Learning, Digital Signal Processing, Control Systems, Medical Equipment, Imaging, Research Methodology, Biological Materials.

EXPERIENCE

Rosea – E-commerce Business, Lebanon

January 2024 – Present

Founder & Business Manager

- Researched and sourced products ensuring high quality offerings.
- Contacted and managed suppliers, negotiating prices and logistics for seamless product delivery.
- Photographed products to ensure appealing, professional imagery for the website.
- Designed and developed the e-commerce website from scratch, learning and applying skills in WordPress, WooCommerce without a formal background in web development.

EEG Controlled Wheelchair Using Brain-Computer Interface, Lebanon

February 2023 – January 2024

Final Year Project

- Developed a brain-computer interface (BCI) system to control a wheelchair using EEG signals.
- Processed and analyzed brainwave data to enable hands-free movement control using MATLAB and Python for signal processing.
- Implemented signals processing and machine learning techniques for accurate command recognition.
- Integrated a camera and obstacle detection sensor to ensure the wheelchair stops if an obstacle appears, enhancing safety.
- Collaborated effectively with a team of 4 colleagues, enhancing communication, problem-solving, and project coordination skills.

Bsharri Governmental Hospital, Lebanon

August 2023 – September 2023

Biomedical Engineering Intern

- Observed and analyzed the functionality and maintenance of various medical devices.
- Gained hands-on exposure to biomedical equipment operations in a hospital setting.
- Developed a deeper understanding of healthcare technology and its impact on patient care.
- Strengthened knowledge of medical device regulations, troubleshooting, and safety protocols.

CERTIFICATIONS

Internet and Computing Core Certification (IC3) – Beirut Arab University

2022

PERSONAL PROJECTS

EMG Prototype Using Arduino & Electrodes

2023 – 2024

- Designed and developed EMG prototypes to detect muscle activity using Arduino and electrodes.
- Gained practical experience in sensor integration, signal processing, and embedded systems.
- Overcame challenges in signal noise and accuracy by implementing filtering algorithms.

Distance Detection System

2023 – 2024

- Developed a system to measure and display distances using microcontroller, ultrasonic sensor, and LCD screen.
- Programmed the microcontroller to interface with the sensor and process real-time distance data.
- Learned to address challenges in real-time data processing and sensor calibration to ensure accurate distance measurement.

SUMMARY SKILLS

- **Languages:** Arabic (Native), English (Proficient).
- **Technical skills:** Python, MATLAB, MPLAB, Tinker Cad, Arduino Programming, Microsoft Office (Word, PowerPoint, Excel), WordPress, Woo commerce.
- **Soft skills:** Communication, Teamwork, Problem-solving, Project coordination.

REFERENCES

References are served upon your request.