

EDUCATION

Computer & Telecommunications Engineering

10/2022 – 7/2027

Lebanese University - Engineering Diploma (Tripoli, Lebanon)

- **Relevant Courses:** Machine Learning, Image processing, Computer vision, Digital Signals & Systems, Telecommunications, Networking, Control Systems, OOP (C#), Operational Research, Advanced Mathematics (Calculus/Algebra/Statistics/Probability), DataBase.
- **Relevant Labs:** Electronics, Telecommunication, LabView, MATLAB, Logic Circuits, Microprocessors, Control systems.

EXPERIENCE

STEM Instructor

7/2023 – 1/2025

Junior Engineers (Tripoli, Lebanon)

- Designed curricula and taught robotics (Arduino IoT, DFRobot, LEGO EV3/WeDo) for children.
- Supervised projects involving smart security systems and electrical circuits.

Biomedical Lab Intern

9/2025

Doctoral School of Science & Technology – Lebanese University (Tripoli, Lebanon)

- Worked on the acquisition and processing of electrophysiological signals (EEG, ECG, EMG) using specialized software data acquisition, analysis, filtering, and artifact suppression.

Summer Intern

8/2025

Ogero Telecom (Tripoli, Lebanon)

- Completed technical training on Central Office OCB systems, fiber optics (IMEWE submarine cable system), switching architectures, transmission methods (SDH/PDH), and signal routing.

CERTIFICATIONS & PROJECTS

Certifications:

- Machine Learning Specialization (3 Courses)	Stanford Online
- EEG Data Analysis Foundations Workshop	Dimagh Academy
- BADEEL Entrepreneurship Program	AUF (Prize: 500€)
- Le numérique au service de la société compétition	AUF (Rank : #2, Prize : 300€)
- Introduction to Computational Neuroscience	Arabs in Neuroscience
- Hackathon : Adaptabilité face aux crises	AUF (Rank : #2)
- SDG Brain Lab Program	UN Global Compact Network Lebanon

University Projects:

- **Nano Invaders game:** Developed an M68k assembly language mini game using the EASy68k simulator.
- **Solenoid Engine:** Built a functional prototype using 3D printing for component fabrication.
- **Smart Security:** Integrated a water pump and security system via Arduino UNO.
- **Home Automation:** Bluetooth-controlled system with **Assembly** on ATMEGA328P and Legos.
- **Hodgkin-Huxley Model:** Simulated neuronal behavior using MATLAB.

SKILLS

Programming: Python, OpenCV, MATLAB, C#, C, HTML/CSS/JS, VHDL, Assembly, SQL.

Software/Tools: Linux (UBUNTU), EEGLAB, Arduino IDE, Deeds-DcS-FsM-McE, Proteus, Quartus II, OrCAD, LabVIEW, AutoCAD.

Languages: Arabic, English, French.

VOLUNTEERING

Institute of Electrical & Electronics Engineers (IEEE) ULFG1 Student branch

10/2022 – Present

Roles: Board Member (2022/2023), President (2023/2024), Ambassador IEEEEXTREME 17.0 (2023), Vice President (2024/2025), Public relation Officer and Consultant (2025/2026).