

Mohammad Omar Shehab

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Objective

An enthusiastic, hardworking, and ethical mechanical engineer and computer scientist aiming to gain more job experience and expand his knowledge. Possesses strong communication, workplace, and technical skills and is keen on gaining new abilities. Wants to pursue a career in industrial/home automation, full stack development, or robotics.

Education

Bachelor of Science in Computer Science

- **Institution:** Beirut Arab University
- **Period of Study:** January 2023 to July 2025
- **Cumulative GPA:** 4.0 out of 4.0

Bachelor of Engineering in Mechanical Engineering

- **Institution:** Beirut Arab University
- **Period of Study:** September 2017 to July 2021
- **Cumulative GPA:** 4.0 out of 4.0
- **Graduated with honors.**
- **Ranked first among all students in the Faculty of Engineering**
- **Awarded the "Jamal Abed Al Nasser" Award for Academic Excellence**

Lebanese Baccalaureate in General Sciences

- **Institution:** Al Bayader School
- **Period of Study:** September 2002 to July 2017
- **Graduation Grade:** 17.44 out of 20.00
- **Graduated on top of my class**

Skills

Hard Skills:

- Java and JavaFX
- C and C++
- HTML, CSS, JavaScript, PHP, and SQL

Experience

Mechanical and Plumbing Design Engineer • ESCOM S.A.R.L. • July 2022 – Present

- Handle client emails, requests, and input.
- Suggest modifications for the company website and aided the development team in implementing them.
- Prepare detailed HVAC, plumbing, and fire design plans for commercial and residential buildings in USA and Gulf area using AutoCAD or Revit MEP.
- Collaborate with architects, structural engineers, and other stakeholders to integrate systems seamlessly.
- Ensure compliance with local codes, regulations, and industry standards.
- Size and calculate load requirements for heating, cooling, ventilation, and water supply systems.
- Select appropriate equipment, materials, and components for mechanical and plumbing systems.
- Review construction drawings, specifications, and submittals.
- Adapt designs based on feedback and field conditions.
- Prepare BOQ documents.

Mechanical Production Line Engineer • United Group Machinery S.A.R.L. • June 2021 – June 2022

- Program Delta programmable logic controllers.
- Manage the admin page of the company website.
- Construct and wired the electrical control panels of refurbished machines as well as draw their electrical diagrams.
- Make regular inventory updates.
- Write operation manuals.
- Research and gather information on various machines and devices.
- Refurbish candy production lines.
- Draw the planar layout of production lines on AutoCAD.
- Design and draw machine parts and components on SolidWorks.
- Attend business meetings and take notes of customers' inquiries, needs, and requirements.

Research Internship • Hogwarts of Engineers • June 2020 – September 2020

- Research implementing Zero-Energy Home solutions in Lebanon.
- Research saving energy in homes using IoT.
- Research growing plants hydroponically in homes.
- Design a control system for PV integrated window louvers with solar tracking.

Projects

5 in 1 Minigames App • December 2023

- JavaFX is used for the front end and back end.

- Basic Python
- Microsoft Office Software Suite
- WPL Soft for Delta PLC programming
- Arduino IDE and MATLAB
- AutoCAD and Revit MEP
- SolidWorks

Soft Skills:

- Self-Learning and Unlearning
- Written and Oral Communication
- Organization and Responsibility
- Teamwork and Research

Interests —

- Artificial Intelligence and Machine Learning
- Robotics
- Internet of Things
- Flutter Mobile App Development
- Renewable Energy
- Full Stack Development
- App Development in Java and C++

Languages —

Native or Bilingual:

- Arabic
- English

Intermediate:

- Italian

Beginner:

- French

- MySQL is used for the database.
- Available games: a trivia game, a balloon shooting game, a focus game, a reaction time game, and an obstacle run game.

Windows Notepad Style App • December 2023

- GUI is built using JavaFX.
- Text is saved in text files locally.
- Available functions: open, new, close, undo, redo, and find & replace.

Simple Address Book App • November 2023

- GUI is built using JavaFX.
- Addresses are saved locally in a binary file.
- Available functions: create new address, view & edit address info, and navigate between addresses.

Solatrix Website • April 2023

- HTML, CSS, JavaScript for front end.
- PHP and MySQL for back end.
- Users can view available solar system equipment and size their solar system based on their needs.

Capstone Project on Automatic Ayrar Processing Machine • Beirut Arab University • September 2020 – June 2021

- Designed, alongside a group, an automatic machine for filling, capping, and labelling Ayrar (yogurt) bottles.
- Optimized the design for the best compromise between cost and productivity as well as optimum safety.

HVAC System Simulation Using Arduino • May 2020

- Simulate the sequence of operations of an HVAC system using an Arduino Uno and appropriate sensors.

Extracurricular

Member of the Local Collegiate Programming Competition Student Club at BAU • January 2023 – Present

- Attending training sessions for the LCPC.
- Came in 47th place in the 2023 LCPC.

Volunteer at Beirutiyyat • August 2020

- Worked with a group of 15 to package and distribute food parcels to families affected by Beirut Port explosion.

Vice Chair of The ASME BAU Student Branch • February 2020 – June 2021

- Organized and hosted events, seminars, and workshops
- Supervised the work of the committee.

Secretary of The ASME BAU Student Branch • January 2019 – June 2019

- Coordinated and scheduled meetings and events
- Wrote meeting minutes, emails, permission letters, and yearly newsletters

Certificates

IC3 Digital Literacy Certification

- Issued by Certiport
- July 24th, 2018
- Credential ID: wkbew-22Lw

Crash Course on Python

- Issued by Coursera
- August 8th, 2020
- Credential ID: 37CVF2MVFK5M

Introduction on IoT & Embedded Systems

- Issued by Coursera
- October 12th, 2020
- Credential ID: MJVM3XR6763S

Awards

Jamal Abed Al Nasser Award for Academic Excellency • July 2021

- Graduated on top of the Faculty of Engineering

First Place in CircuitPython Day Competition • October 2020

- Hosted by Hogwarts of Engineers during the month of September 2020
- Throughout the month, tasks were given that were to be solved by writing Python code scripts.

80% Tuition Discount • September 2018 – June 2020

- 1st place on the students rank list for four consecutive semesters with a SGPA of 4.00