

Marwa AlFaouri, Mechatronics Engineer

B.Sc. University of Jordan, Amman, Jordan, 2013

Date & place of birth	Feb. 8 th , 1990, Jordan
Address	Marj Al-Hamam, Amman, Jordan
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Education

2008-2013	B.Sc. of Mechatronics Engineering , University of Jordan – Faculty of Engineering and Technology, Amman, Jordan.
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2008	Ein Al Basha Secondary school for Girls, Amman, Jordan General Average is 93.4 out of 100
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Work Experience

German Jordanian University, Jordan

Job Title: Research and Teaching Assistant

Responsibilities:

Mar 2015-till now

- Research and Surveying
 - Co-authored several highly cited scientific papers and participated in several research projects including surveying and data analyzing (electricity demand in Jordan) and (residential heating in Jordan).
 - Establishing and teaching Computer-aided Math Course (Python and MATLAB)
 - Teaching the following laboratories [with (*) indicates establishing and preparing the manual]:
 - Industry 4.0(*)
 - Programmable Logic Controller (PLC)
 - Robotics(*)
 - Mechatronics Systems Design(*)
 - Control and Vibration(*)
 - Automatic Control Systems
 - Real-time Systems
 - Manufacturing Processes
 - Computer-aided Drawing - AutoCAD
 - Grading various courses.
 - Administrative work (Technical and Procurement Committees, Student and Courses Surveying Committees for School Annual Report)
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SatchNet Electronic Systems, Amman, Jordan

It is one of the leading Jordanian Companies in the field of Integrated Control and Monitoring Systems (Building Management & Automation Systems -BMS), especially Control Systems for Heating, Ventilation and Air Conditioning (HVAC), CCTV, Security, Access Control Systems as well as Lighting Control Systems.

Job Title: Office Support Engineer

Responsibilities :

**Nov 2013-
Mar 2015**

- Design a BMS Control System, DDC System and field devices to give the best functions and maximum efficiency and return on investment.
- Specifying the system needed and designing a control system to cover (BMS, Guest Room Management System, Lighting System, Metering and Billing, Energy Efficiency...)
- Performing and scheduling all mechanical equipment in the field, then preparing point list for that equipment.
- Selecting the suitable device to either measure or control signals.
- Preparing an offer with estimated cost for the whole system (Building Workstation, DDC controllers, Field devices, Valve and actuators and third-party systems.
- Preparing system and control system drawing with all points considered

Seabird Aviation Jordan L.L.C. Amman, Jordan

Jun – Aug 2012

Mechatronics Engineer/Trainee

Manufacturing, modifying aircraft, conducting successful flight tests and integration of complex airborne equipment.

Technical Skills

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- Python
 - AutoCAD, Pro Engineer, MPLAB
 - MATLAB and Simulink
 - PLC Programming, C++
 - Visio, Risers
 - Simatic
 - Professional Excel
 - Minitab

Training Courses

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- “Innovation Management Level 1: Innovation Associated “ GJU, Jordan, 2022
 - “Python Essentials course” GJU, Jordan, 2021
 - “Successful Technical Business Writing” JEA, Jordan, 2014.
 - “Electrical Installation” University of Jordan, Amman, 2011.
 - “Cambridge Course for IT Skills” National Information Technology Centre, Amman, 2007.

Publications

- Ryalat, M., ElMoaqet, H., & **AlFaouri, M.** (2023). Design of a smart factory based on cyber-physical systems and Internet of Things towards Industry 4.0. *Applied Sciences*, 13(4), 2156.
- Almuhtady, A., & **Alfaouri, M.** (2020). Synergy of intelligent design and operation for sustainable residential heating systems, case study: Jordanian residential sector. *Sustainable Cities and Society*, 55, 102034.
- Almuhtady, A., Alshwawra, A., **Alfaouri, M.**, Al-Kouz, W., & Al-Hinti, I. (2019). Investigation of the trends of electricity demands in Jordan and its susceptibility to the ambient air temperature towards sustainable electricity generation. *Energy, Sustainability and Society*, 9, 1-18.
- Almuhtady, A., Oweineh, A., Abdallah, I., Rouqa, H., Alazzam, A., & **AlFaouri, M.** (2019, March). Integrated Thermal Adequacy, System Intelligence, and Renewable-Energy-Assisted Systems: towards sustainable heating systems in Jordanian residential sector. In *2019 10th International Renewable Energy Congress (IREC)* (pp. 1-6). , Sousse, Tunisia, IEEE.
- Ryalat, M., ElMoaqet, H., Almtireen, N., & **AlFaouri, M.** (2023,September). Towards Industry 4.0: Mechatronics Design of a Smart Factory with IoT-Enabled Real-Time Control Using myRIO with LabVIEW. In *2023 17th Mechatronics Forum International Conference, Leuven, Belgium*.

Languages

- Arabic: Language is the native language.
- English: Very good (Writing, and Reading), Good Speaking.

Honors and Awards

- Best Teaching Assistant Award in School of Applied Technical Sciences, German Jordanian University, Amman, Jordan, 2017-2018.
- Instructor Recognition for teaching the 15-hour SATS Little Professors Microcontroller Programming course, School of Applied Technical Sciences, German Jordanian University, Amman, Jordan, 2017.
- Exceptional Administrative Effort Recognition for preparing SATS Newsletter, Amman, Jordan, 2016.