

# SAIF KHAFAJAH

[Saifpad25@gmail.com](mailto:Saifpad25@gmail.com) | 0788448021  
Amman, Jordan 11185

## PROFESSIONAL SUMMARY

Skilled Mechatronics Engineer with hands-on experience in **PCB design, mechanical system Design and development, and ROS (Robot Operating System) integration**. Proficient in designing multi-layer PCBs using industry-standard tools (such as Altium Designer), ensuring signal integrity, manufacturability, and system reliability. I am skilled in 3D CAD modeling, mechanical component fabrication, and prototyping for robotics and embedded systems. Strong foundation in ROS 1 and ROS 2, with experience in developing robotics applications including motion planning, sensor integration, and autonomous navigation. Adept at cross-functional collaboration, embedded system programming, and real-time system optimization.

## SKILLS

- CAD (Fusion 360 / SolidWorks)
- Robot operating system (ROS) developing
- Project Management
- Multilayer PCB Design (Altium PCB designer)
- Microcontroller Programming
- Control Systems Design

## WORK Experience

**Robotics Engineering Intern** | Orange FabLab, Irbid 06/2023 – 09/2025

- Design & Fabrication Team Leader At "Mars JO Rover "
- Main Electronics and Electrical Engineer
- ROS Developer
- Optimized fabrication workflows, reducing time-to-completion by 20%.
- Reduced production time for projects by streamlining communication between Design and fabrication teams.
- Enhanced robotic system efficiency by designing and implementing mechatronic components.

## Tutor | Several Organizations

- CAD Design Courses - IEEE
- Digital Fabrication courses – Orange JO
- Electronics Design Courses – Orange JO
- PCB design Using Altium PCB designer - IEEE
- Smart system Design – Yarmouk university
- Fundamentals of microprocessors – Hashemite University
- C++/Micro C - IEEE
- PYTHON - IEEE

## **Chairperson I (voluntary)**

- IEEE BAU Student branch – Jordan 08/2024 - 08/2025
- IEEE BAU SIGHT - Jordan 08/2023 - 08/24
  - Developed strategic plans for organizational growth, resulting in increased Revenue and expanded services.
  - Mentored executive team members to strengthen leadership skills and improve decision-making processes.
  - Improved stakeholder relations by proactively engaging with community leaders, Partners, and donors,

## **Key Projects**

- 1:1 Sized Quadruped Mars Rover For Space exploration purposes
- Robot operating system (ROS) developing Projects: Indoor navigation Using Gazebo & Rviz
- Several Raspberry pi / Nvidia jetson nano projects
- Drone Flight controller full Multilayer PCB
- 5 DOF Robot Arm For industrial purposes

## **EDUCATION**

- **BSc. Mechatronics Engineering** – Al-Balqa Applied University (until Jul/2026)
- **Associate of Science in Space Shuttle Engineering** – MIT (Online)

## **LANGUEAGES**

- **Arabic:** Native
- **English:** Advanced (C1)

- I hereby declare the above given information are correct to the best of my knowledge.

Place: Amman - Jordan

(Eng. Saif al-deen A. Khafajah)

