

## Curriculum vitae

### Personal Information:

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### Education:

- Oct. 2021-Present, Princess Sumaya University for Technology, Candidate for Master's degree in Electrical Engineering.
- Sep. 2017–Jun. 2021, Al-balqa Applied University / Faculty of Engineering Technology, Bachelor in Mechatronics Engineering (GPA: 3.81 / Top of class).
- Sep. 2017, High school certificate in scientific track [Tawjihi] (83.6).

### Work Experience:

- Sep. 2022-Present, Laboratory Supervisor at Princess Sumaya University for Technology, Amman, Jordan.
- Oct. 2021-Sep. 2022, Teaching and Research Assistant (TA/RA) at Princess Sumaya University for Technology, Amman, Jordan.
- Oct. 2021-Jun. 2022, Projects Executor (Freelance) at Islamic Center Charity Society (ICCS), Amman/Ar Rusaifa, Jordan.
- Aug. 2021-Oct. 2021, Production Engineer at International Co. for Optical & Hearing Aid Industries (ICOH), Amman, Jordan.
- Aug. 2020-Jun. 2021, Technical Consultant (Arduino coach and Innovation Lab Supervisor and Instructor) at The Lutheran World Federation (LWF), Az Zarqa, Jordan.

## Volunteer work:

- Jun. 2021-Aug. 2021, Volunteer at Artal Industrial Store (Online Store).
- Jan. 2020-Feb. 2021, Arduino Coach and Trainer at IEEE Robotics and Automation Society (RAS) in Al-balqa Applied University Student Branch.
- Jun. 2019-Nov. 2020, Treasurer at IEEE Al-balqa Applied University Student Branch.
- Nov 2019-Mar. 2020, Treasurer at IEEE MESYP 2020 Congress.
- Jun. 2019-Dec. 2019, Translator at (IEEE بالعربية) Initiative.
- Apr. 2019-Nov 2019, Treasurer at IEEE Robotics and Automation Society (RAS) in Al-balqa Applied University Student Branch.

## Training:

### University training:

- Feb. 2021-May. 2021, Automation and Maintenance Engineer at Households and Toiletries manufacturing company – Sukhtian Group (HTM – Sukhtian).

## Skills and Experiences:

### Courses and Workshops:

- May. 2023, AR / VR Workshop (6 Training Hours).
- Nov. – Dec. 2022, AI Fundamentals Course (16 Training Hours).
- Nov. – Dec. 2022, Raspberry Pi Course (16 Training Hours).
- Sep. 2022, Eff. comm. skills and body language Course (9 Training Hours).
- May. – Aug. 2022, Electronics, Circuits, PCB Design Course (24 Training Hours).
- Jul. – Aug. 2022, Machine Learning Course [Online] (25 Training Hours).
- Jul. – Aug. 2022, Python Course [Online] (25 Training Hours).
- Nov. 2020, E-Bot workshop (6 Training Hours).
- Jun. – Jul. 2020, Fusion 360 Course [Online] (16 Training Hours).
- Feb. 2020, VFD Workshop (5 Training Hours).
- Nov. – Dec. 2019, PLC Course (20 Training Hours).
- Dec. 2019, PV Systems Workshop (5 Training Hours).
- Nov. 2019, LabView Workshop (5 Training Hours).
- Sep. – Oct. 2020, IoT Course (20 Training Hours).
- Jul. 2019, 3D Modeling Workshop (5 Training Hours).
- Jun. 2019, SCADA Workshop (4 Training Hours).
- Apr. 2019, Robotic Arm Workshop (5 Training Hours).

- Feb. – Mar. 2019, IoT Course (16 Training Hours).
- Dec. 2018, Bluetooth Car Workshop (5 Training Hours).
- Dec. 2018, SolidWorks Workshop (5 Training Hours).
- Nov. 2018, Industrial Control Workshop (6 Training Hours).
- Oct. 2018, IoT Workshop (6 Training Hours).
- Sep. 2018, Practical Electronics and Arduino Course (25 Training Hours).

### **Organizational and Communication Skills:**

- Dec. 2019, Presenter at IEEE Spectrum Lab 3.
- Dec. 2019, Organizer at IEEE Spectrum Lab 3.
- Oct. 2019, Organizer at IEEE Day 2019.

### **Computer Programs and Programming Languages:**

#### **Computer Programs:**

- Microsoft Office: Word, Excel, PowerPoint.
- Fusion 360.
- AutoCAD.
- MATLAB.
- Multisim.
- Proteus.
- ADS.
- Eplan.
- PSIM.
- Automation Studio.

#### **Programming Languages:**

- C/C++/MicroC.
- MATLAB.
- Python.
- Verilog.
- PLC Programming.

### **Mother tongue and Foreign Languages:**

#### **Mother tongue:**

- Arabic Language.

#### **Foreign Languages:**

- English Language: Speaking, Writing and Reading.

## Scholarships:

- Oct. 2021, Graduate Teaching assistantship from Princess Sumaya University for Technology.

## Projects:

- **Farmer Robot & Smart Farm (Graduation Project):**

The project consists of two main parts; First part is the Farmer Robot, this robot is programmed to automatically harvest ripe fruits or vegetables using a robotic arm mounted on the front of the moving body of the robot with a Camera which depends on Image Processing (Color Detection) Techniques on Python, the second part is the Smart Farm, the farm management system including irrigation system and heating and cooling system is monitored and controlled using IoT Technology and all connected to a mobile application.

- **Medical Vending Machine:**

The Project was about designing and building a vending machine for medical purposes, it consists of a RFID card reader defined for patients, as the patient scan their card on the reader, the system checks whether this patient is eligible of having his meds this month or not and what are his meds that he should have, all this connected to a database through google sheets using lot Technologies, this project can be helpful in pharmacies and hospital for patients who are having their meds in a monthly pattern and can save time and effort for both patients and meds suppliers.

- **Smart Recycle Bin:**

The project was about designing and manufacturing a smart recycle bin that detects the material of which the recycled objects are made of and sort them into different bins , it was able to detect paper, glass, metal and plastic using multiple sensors, the bin itself was divided into four bins to hold the different types of materials as it rotates using a stepper motor to the corresponding bin of the detected object material.

- **Self-balancing serving-tray:**

This project demonstrated designing and constructing a fully automated self balancing serving tray, the balancing was on only one axis through an accelerometer connected to a controller to measure the angle of inclination of the tray itself, then this feedback is sent through serial communication to another controller which performs a PID control to tell the servo motor the angle it should rotate to balance the tray, the project was useful in different applications in restaurants and coffee shops as well as for personal use at homes, and it may be further developed to be able to balance on two axes instead of only one.

- **Other projects :**

Many other projects were developed such as: Smart blind stick, Fire fighting robot, Smart gas heater, Smart fire alarm system, Smart medical reminder, Smart children tracker, etc...

**Competitions:**

- Jun. 2019, Competitor at IEEE RAS Portal Firefighting I (Robotics competition).

**Conferences and Congresses Attended:**

- 2022, Spectrum Lab 4.
- 2020, Super Node 4.
- 2019, Spectrum Lab 3.
- 2019, JSYP 19.
- 2019, Super node 3.
- 2018, SpectrOne.