Mohammed AI-Qaisi

Hi-Tech Man & Proud Geek

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EXPERIENCE

Graduation Projects Supervisor **Palestine Polytechnic University** Cctober 2021 – 2023

Hebron, Palestine

- Supervise, Guideline and contribute to graduation projects, focusing on cutting-edge research and practical application.
- Oversaw two noteworthy projects. The first project focused on estimating heart rate by utilizing the Hilbert transform and analyzing Ballistocardiogram (BCG) signals. The second project involved the detection of bacteria using a capacitive biosensor.
- Electronics and Microcontroller Lab Supervisor **Palestine Polytechnic University**

October 2015 – Ongoing

Hebron, Palestine

Supervise Electronics' and Microcontroller Labs, Teach Electrical Department Lab's: Electronics, Control System, Microcontroller, Sensors and Digital Design.

Embedded Systems R&D Engineer **INTILAQA** Corporation

September 2015 – October 2017 Hebron. Palestine

- Understand customer's technical requirements and ensure that the products meet them.
- Design and fabricate an IoT Smart Energy Meters.

Research and Teaching Assistant

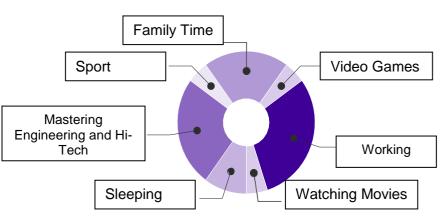
Palestine Polytechnic University

September 2013 – July 2015

Hebron, Palestine

I have experience leading formal discussion sections, providing instruction for classes upon request, and supervising laboratory sections within the Department of Electrical Engineering. This includes conducting sessions in labs such as Electronics Lab, Sensor Lab, and Electricity Lab.

A DAY OF MY LIFE





LIFE PHILOSOPHY

"The Only Limits, is your Imagination."

SKILLS

Programming

Skilled in programming with C, C++, LabVIEW and MATLAB.

Microcontroller

- Skilled in Microcontroller programming (PIC, AVR and ARM microcontrollers) and configurations.
- Designing embedded systems using microcontroller and systems interfacing.
- implementations Algorithms and optimization using microcontroller.

Mobile Robot design, System control design, Implementations and programming with Robot Operating System (ROS). Robots control and programming using ROS with single board computer (SBC).

Electronics

- Very good with analog electronics design, Digital electronics Design, sensors conditioning and interfacing.
- Very good with power electronics design.
- Analog and digital signal processing.

Mathematics

- Good in calculus, applied mathematics, linear algebra, and differential equations.
- Skilled in applying mathematical principles to real-world scenarios.
- Experienced in mathematical modeling and utilizing mathematical software.

STRENGTHS

Hard-working	Persuasive
Never Stop Experimenting	
Persistence & Loyalty	

LANGUAGES

Arabic English Hebrew



EDUCATION

M.S. in Mechatronics Engineering

Palestine Polytechnic University

Thesis: Single Board Computer ROS-Based Tennis Balls Collecting mobile Robot.

- Conducted research on designing and programming mobile robots utilizing ROS.
- Develop/adapt algorithms corresponding to the required robot tasks and implement them with ROS.
- Install a SBC (Raspberry Pi 4) on the robot and deploy ROS on it using a standard operating system (Linux).
- Integrated various sensors and actuators to achieve autonomous navigation and intelligent, optimized decisionmaking capabilities.
- Developed expertise in hardware integration and software development for robotics applications.

B.S. in Electrical Engineering

Palestine Polytechnic University

🗎 Sept 2007 – June 2012

Specialized in biomedical engineering branch field. Graduation Project: Design and implementation of a single channel three-electrodes three-leads ECG systems single channel three-electrodes three-leads ECG systems.

- Gained experience in electronics design for medical application.
- Understanding the principles of biomedical signal acquisition, signal processing, and data analysis.
- Gain hands-on experience with sensors, amplifiers, filters, and digital signal processing techniques
- Developed expertise in hardware integration and software developments for medical applications.

INTERESTS & HOBBIES

- Sport: Cycling, swimming and Hiking.
- Hi-Tech
- Space
- Traveling and adventures.
- Video games & Movies

REFEREES

Dr. Ramzi Al-Qawasmi.

Assistance of Academic Deputy

Palestine Polytechnic University

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Dr. Khaled Tamizi

Assistant Professor

Palestine Polytechnic University
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Dr. Sami Al-Salamine

Research group leader Hyperstone, Germany

Former Post doc Stuttgart University, Germany asami@ppu.edu

Dr. Nassim Iqtait

Assistant Professor & Head of the Electrical Engineering Department.

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Eng. Shadi Rjoub

Branch Manager at **SELCo** & **INILAQA** CEO.

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