

# MOHAMMAD ABU-SHELBAIA

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Ramallah, Palestine

## SUMMARY

Graduated with excellence from Birzeit University with a degree in Computer Engineering. Currently working as a Teaching and Research Assistant at the same institution. Experienced in full-stack web development. Proficient in Python, with a strong focus on automation, web scraping, and backend services.

## SKILLS

**Languages:** Python, LaTeX, Markdown, Bash, Assembly, Java, C, SQL, HTML, CSS

**Technologies:** Git, FastAPI, Flask, Asyncio, Django, Tailwind CSS, Docker, PostgreSQL, Arduino, Nginx, Gunicorn

## EXPERIENCE

9/2024 – Present

### Teaching And Research Assistant

[Birzeit University](#)

Assisted in delivering laboratory sessions on microcontroller programming and embedded systems. Provided mentorship and support to students, evaluated assignments, and contributed to the preparation of lab materials.

7/2024 – Present

### Backend Developer

[Sital](#)

Contributed to the development and maintenance of a data processing pipeline for managing and analyzing product data. Wrote unit tests to ensure the reliability of Flask API endpoints.

3/2024 – 7/2024

### Backend Developer Intern

[Sital](#)

Built a full-stack bookstore application using Django and Tailwind CSS, implementing core functionality and an intuitive user interface. Deployed the application with Docker Compose, using Nginx, Gunicorn, and PostgreSQL for a robust and production-ready setup.

## PROJECTS

Web Scrapping  
Python, iCal

### Course Schedule

[github.com](#)

Developed a Python script to automate the extraction of weekly schedules from my university website and convert them into recurring iCal events. This project aimed to improve personal organization and time management by eliminating manual schedule data entry.

Django, Tailwind CSS  
Nginx, Gunicorn

### Django Bookstore

[github.com](#)

Developed a full-stack web application using Django and Tailwind CSS to display a collection of books. Utilized Nginx as a reverse proxy server and Gunicorn as the WSGI server to deploy the application using Docker. The project aimed to showcase skills in web development and backend services.

Robotics  
ESP32, Arduino

### Micromouse Robot

[github.com](#)

Designed and implemented a maze-solving robot using the ESP32 microcontroller and the Arduino framework. The robot was programmed to autonomously navigate a maze and find the shortest path to the center using the Flood Fill algorithm.

Embedded Systems  
PIC16f877A-Assembly

### PIC16f877A Calculator

[github.com](#)

Developed a functional calculator on a PIC16f877A microcontroller, showcasing skills in embedded systems design and assembly language programming.

## EDUCATION

9/2020 - 7/2024

### Birzeit University

Bachelor

Computer Engineering  
Cumulative Average: 87%

28th July 2024

### Udacity

Nanodegree Certificate

Data Analyst  
Certificate Link

## LANGUAGES

English - C2 (CEFR), Arabic - Native