




# MOHAMMAD ABU-SHELBAIA

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 Ramallah, Palestine

## SUMMARY

Undergraduate Computer Engineering student at Birzeit University expected to graduate in July 2024. Passionate about software development, embedded systems, and robotics. Experienced in **Python** as the primary programming language,

## SKILLS

**Languages:** Python, LaTeX, Markdown, Bash, Assembly, Java, C, SQL, HTML, CSS  
**Technologies:** Git, Django, Tailwind CSS, Docker, PostgreSQL, Arduino, Nginx, Unicorn

## EXPERIENCE

3/2024 - 7/2024

### Backend Developer Intern

Silal

- Developed and maintained backend services using the Django framework.
  - Designed and implemented RESTful APIs for various applications.
  - Utilized Docker for containerization and deployment, ensuring a consistent development and production environment.
  - Integrated PostgreSQL as the primary database, optimizing queries and maintaining data integrity.
  - Configured and managed Nginx as a reverse proxy server to handle client requests and serve static files efficiently.
  - Deployed and managed WSGI applications using Unicorn to handle Django web application processes.
  - Seamlessly integrated backend services with the user interface, utilizing Tailwind CSS for styling.
  - Conducted code reviews and debugging to maintain high code quality and performance.
  - Implemented authentication and authorization mechanisms to secure applications.
- Docker / PostgreSQL / Nginx / Unicorn / Django / Tailwind CSS

## 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.

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.

Discord Bot  
Python

### Botzilla

github.com

Developed a Discord bot using the Pycord library to automate server management tasks and provide entertainment features. The bot is capable of moderating chat, generating server statistics, and moderating server activities.

## EDUCATION

9/2020 - 7/2024

### Birzeit University

Bachelor

Computer Engineering  
Expected Graduation: July 2024  
Cumulative Average: 87.4%

## LANGUAGES

English - C1 (CEFR), Arabic - Native