

Professional Experience

Data Scientist & ML Trainee

Jan 2026 - Present
Remotely

IBT-Learning

- Ongoing intensive bootcamp covering Python for data analysis, SQL, and machine learning fundamentals.
- Hands-on practice with data cleaning, exploratory data analysis (EDA), and visualization using Python, Excel, and PowerBI.

Data Engineering Trainee

Feb 2025 - June 2025
On-site (Rawabi)

ASAL Technologies.

- Engineered a real-time, event-driven Python/Prefect ETL pipeline to transform MongoDB Change Streams into analytical metrics via automated MySQL upserts.
- Applied SOLID principles and Factory pattern to modularize ETL and improve maintainability.

Back-End Engineering Trainee

Oct 2024 – Jan 2025
On-site (Rawabi)

ASAL Technologies

- Developed RESTful APIs in C#/.NET Core with MongoDB CRUD operations.
- Implemented authentication, validation, and cross-team backend collaboration.

Education

Birzeit University B.Sc. in Computer Engineering – GPA: 3.2

Ramallah

2020 - 2025

Projects

Traffic Management & Red-Light Violation [\[GitHub\]](#)

July 2025

- Built an end-to-end computer vision system for queue-aware traffic signal recommendations using overhead drone footage (YOLOv8 + SORT + polygon ROIs).
- Achieved 91.7% mAP@0.5 on the validation set for YOLOv8 vehicle detection, and improved traffic throughput by ~0.25 cars/s compared to fixed timing (simulation-based).
- Implemented red-light violation detection using stop-line logic and best-frame evidence capture, then extracted license plates using plate detection + OCR.
- **Technologies:** YOLOv8, SORT, OpenCV, OCR, Roboflow, FastAPI, React, MongoDB.

Arabic Question Answering [\[GitHub\]](#)

Jan 2024

- Built a simple Arabic Q&A demo using a pre-trained AraELECTRA question-answering model.
- Applied AraBERT-style preprocessing (ArabertPreprocessor) and tokenization to format question/context inputs and extract answer spans.
- **Technologies:** PyTorch, Transformers, AraBERT, NLP.

Palestine Store Hub [\[GitHub\]](#)

Jan 2025

- Developed RESTful APIs using C#/.NET Core and MongoDB to power marketplace features including search, filtering, geolocation, and ratings.
- Implemented robust validation, state management, and secure authentication mechanisms to ensure data integrity and user security.
- **Technologies:** C#/.NET Core, MongoDB, REST APIs.

Skills

Languages: Java, C, Python, C#.

Computer Vision/ ML: Yolov8, OpenCV, SORT, OCR, Roboflow.

Backend: ASP.Net Core/ FastAPI

Databases: MySQL, MongoDB.