

Ali Ameur

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EDUCATION

IMPERIAL COLLEGE LONDON

MEng in Molecular Bioengineering
Expected June 2025 | London, UK
Grade: Predicted 1st Class
Highest Grade in Programming 2
Module (100%)

Rabat American School

June 2021 | Rabat, Morocco
Higher-Level Classes:

- Mathematics A&A: 7
- Chemistry: 7
- Economics: 6

Societies:

- President of Mathematics Society
- President and Founder, CS Society

COURSES

- Scientific Computing with Python
 - Learned fundamental Python mechanics.
 - Gained elementary knowledge of data visualization.
- Data Analysis with Python
 - Learned the process of data analysis
 - Worked extensively with libraries such as NumPy, Pandas, Matplotlib, Seaborn
- 100 Days of Code
 - Built a variety of projects involving web automation and web scraping, data analysis and backend web development.
- Mastering Flask
 - Mastered Flask as a microweb framework.
 - Built and implemented proprietary Flask extension.

SKILLS

TECHNOLOGIES

Proficient:

Python • JavaScript • Flask • HTML/CSS
• Git • Docker • PyTorch • Java • Firebase
• MATLAB

Familiar:

R • C++ • Google Cloud • AWS • Postman

PERSONAL PROJECTS

PLANT GROWTH AND IMAGING DEVICES

- Developed a plant growth and imaging device that is controlled by a dashboard powered by a **RESTful API** on the backend.
- Enabled **integrations** with common software used by bioengineers for their plant research, served as a **Flask** app.
- Followed current industry standards by offloading **computationally expensive** tasks to asynchronous worker using the RabbitMQ system, **reducing** the load on the Flask app.
- Reduced technical debt to allow for appropriate flexibility and consistency of the software and permit **adequate communication** with the relational database.
- Stack: Flask, OpenCV, SQLAlchemy, RPI.GPIO, Pika (RabbitMQ), Jinja, HTML/CSS, Bootstrap, JavaScript, AJAX

CHEGG DISCORD BOT

- Leveraged **selenium** and a custom undetected chrome driver to **bypass** Cloudflare protection.
- Incorporated a solution that counters **anti-bot** practices by rotating bot signature and **solved captcha automatically**.
- Integrated the project into a **user-friendly** format by leveraging **Discord's API** while building a **chatbot** that operates asynchronously.
- Stack: Selenium, Discord, asyncio, imaplib

SOLESTASH - RESELLER SOFTWARE

- Optimised server usage by integrating a **RabbitMQ** message broker to selectively distribute load of microservices with **6000 monthly users**.
- Designed a **computer vision** module, that cut the usage of paper by **70%**, with the ability read, **interpret**, and modify labels, aiding reseller workflow.

EXPERIENCE

TECHNOGAZ | Software Engineer Intern

July 2022 - September 2022 | Casablanca, Morocco

- Developed a **framework** that programmatically accessed the drilling data of the company using a **Python API**.
- Conducted **exploratory analysis** and identified inefficiencies in fuel delivery routes.
- Collaborated with the operations team to develop **real-time** monitoring dashboards for storage tank levels, enabling more proactive maintenance and **minimizing downtime** due to maintenance issues.

ZIZ | Data Analytics Intern

June 2021 - September 2021 | Casablanca, Morocco

- Improved **accuracy** of an oil drilling simulation by **11%** using complex algorithms.
- Developed a **simulation** using **machine learning** that identified impurities within the drilled oil during the "separation" process of oil refinement.
- Predicted sales within **3%** using a proprietary **regression model**.

LANGUAGES AND INTERESTS

Languages: English, French, Arabic, Spanish

Interests: Poker, Currency Markets, Chess, Football