
EDUCATION

American University of Beirut (AUB)

- Bachelor of Pure Mathematics (**Linear Algebra, Differential Equations, Probability and Statistics, Functional Analysis & Partial Differential Equations**)

EXPERIENCE

AUB, Olayan School of Business

Dec.25-Present

NLP & Data Processing Research Assistant Full Time

- ☐ Leveraged AI-assisted coding tools (Cursor, Claude) to rapidly develop and iterate on production-grade NLP pipelines, accelerating development cycles by 40% while maintaining code quality and best practices.
- ☐ Integrated GPT API into production workflows to automatically extract structured metadata from TV show transcripts, implementing robust prompt engineering strategies and error handling for reliable data extraction at scale.
- ☐ Designed an automated pipeline using LLMs to transform raw, long-form TV transcripts into structured, segmented datasets.
- ☐ Enhanced segmentation accuracy by conducting systematic error analysis and iterating prompt strategies to resolve complex speaker misclassifications.
- ☐ Developed workflows to clean and structure large-scale unstructured media data, ensuring high-fidelity inputs for downstream analysis and research.

GEOAI CNRS Mansourieh, Lebanon

May.24-Feb.25

XAI Research Internship

- Conducted in-depth data analysis of satellite imagery datasets and applied the UNet model for precise building detection.
- Executed detailed methodological application by modifying Class Activation Mapping (CAM) techniques, which required careful quality checks and analysis of performance metrics.
- Integrated XAI methods to significantly improve model transparency and interpretability, ensuring robust and explainable AI outcomes.

FREELANCE PROJECTS

Consensus Labeling Algorithm for Image Annotation

- Built a Python consensus labeling algorithm to unify multi-annotator inputs, with adjustable QA thresholds and automated JSON/precision reporting for dataset validation.

Face Detection

- Developed TensorFlow models for face detection and image quality analysis, including automated sharpness evaluation modules and data integrity checks to optimize input quality.

EXTRACURRICULAR ACTIVITIES

Event Organization Volunteer- Women in Data Science MENA @ AUB

Mar.24-Apr.24

- Provided on-site logistical management and volunteer coordination for the Women in Data Science conference at AUB, ensuring seamless event execution.

Pivoine Maison Montréal, Canada

Nov.25-Present

Co-founder & Owner

- Co-founded and managed an end-to-end hijab business, overseeing operations, product development, and process optimization.

Media and Graphics Team Leader - Cultural Club of the South AUB

Dec.22-Jan.24

- Directed a cross-functional creative team (designers, photographers, social media) to manage media production and event coverage for a major student organization.

Lebanese National Higher Conservatory of Music

Sep.17-Jul.22

- Completed five years of advanced musical studies, demonstrating long-term discipline and commitment.

SKILLS

- Core Competencies:** Technical Leadership, Problem-Solving, and Cross-Functional Teamwork.
- AI & Machine Learning:** Deep Learning, NLP (LLMs/Prompt Engineering), Computer Vision, Time Series Analysis, and Explainable AI (SHAP, LIME, CAM).

- **Data Science & Analytics:** Statistical Modeling, Exploratory Data Analysis (EDA), Model Evaluation, and Data Visualization.
- **Technical Stack:** Python, SQL, Git, Linux, Jupyter Notebooks, and TensorFlow.
- **Languages:** Fluent in Arabic, English, and French (DELF B2).