

Jiany Samara

Lebanon | +961 76621030 | jianysamara@gmail.com | [linkedin.com/in/jianysamara](https://www.linkedin.com/in/jianysamara) | github.com/Jiany-S

EDUCATION

American University of Beirut (AUB) – BSc Computer Science, Econ Minor Aug 2024 – Present

- GPA: 4.0/4.0; Dean's Honor List; President's Merit Scholar; Rank 1/152

London School of Economics (LSE) – EC201: Intermediate Microeconomics Summer 2025

EXPERIENCE

Research Assistant – AUB (Prof. Hiam Khoury/Prof. Mohamed Kobeissi) Oct 2025 – Present

- Built a subject-holdout multimodal stress classification pipeline (ECG, HRV, EDA, EEG) using XGBoost and Temporal Fusion Transformer, evaluating 11,988 test windows and achieving AUROC 0.768 / F1 0.576 on a controlled WESAD benchmark with personalized baseline profiling.
- Designing a digital twin–based adaptive velocity control system integrating time-to-collision modeling, ISO 13855 safety constraints, and a seven-pattern interaction taxonomy for real-time human–robot safety (<500 ms latency target, ROS2-ready).
- Designing a dynamic Bayesian model for predicting the FIFA World Cup 2026 outcome, integrating temporal team form, advanced football metrics, and large-scale Monte Carlo tournament simulations.

Lead Data Analyst – Global Strategy Review

Jun 2025 – Present

- Lead analytical research on global economic and societal trends, synthesizing quantitative data and policy literature into strategic editorial insights.
- Author original articles and support editing to ensure clarity and accuracy for an international audience.

Private Tutoring – Elevate Arabia & Simple A

Oct 2024 – Present

- Taught university-level Data Structures, Algorithms, and Systems Programming; mentored 20+ cohorts with +20 point average score increase.

Fintech Shadowing – Murex & Bankmed

Jun 2023 – Aug 2023

- Shadowed teams across core banking and fintech operations to observe workflows, tools, and processes.

PROJECTS

Java Blockchain Node

- Built an account-based Proof-of-Work node with deterministic replay on RocksDB; validated 120 K+ blocks with zero divergence across consensus, P2P, and RPC layers.
- Automated reproducible CI/CD with GitHub Actions publishing shaded JAR and Docker images; exposed 14+ REST/RPC endpoints and Prometheus metrics for full remote administration.

Willing – Volunteering Platform (Startup Project)

- Designed and implemented an AI-powered volunteer–opportunity matching engine using OpenAI text-embedding-3-small and PostgreSQL pgvector, modeling users with dual semantic vectors scalable cosine-similarity ranking.
- Built a Node.js embedding pipeline enabling real-time profile updates and recommendations across thousands of opportunities.

Inflation Nowcasting Neural Network

- Built a LSTM model reducing MAE by 28% (0.438→0.315) and sMAPE by 16.9% vs. XGBoost on 60-lag features, with rolling backtests (median MAE 0.307) and automated reporting for reproducible evaluation.

LEADERSHIP & VOLUNTEERING

Software Developer – Google Developer Group on Campus

Oct 2025 – Present

- Lead open-source campus projects and technical workshops on modern frameworks.

Elected Student Representative – University Student Council

Oct 2025 – Present

- Implementing a university-wide Coding Tutoring Center and restructuring university CS curriculum.

AUBMUN Cabinet – Model United Nations

Sep 2022 – Present

- Founded High School MUN club; recruited 12 advisors, trained 60+ delegates, increased win rate +70%.
- Committee Consultant for AUBMUN, coordinating 25 committees and 1,000+ participants.

Delegate – UNICEF AUB & LiveLunger

Oct 2025 – Present

Treasurer – Computer Science Student Society (CSSS) Cabinet

Oct 2025 – Present

President of Student Council – Sainte Famille Fanar High School

Sep 2022 – Jul 2024

SKILLS

- **Backend & ML:** Java, Python, Netty, RocksDB, REST/RPC, TensorFlow, scikit-learn, XGBoost, PyTorch
- **Infrastructure & Data:** PostgreSQL, Redis, Docker, Linux, Git