

Education

AMERICAN UNIVERSITY OF BEIRUT

BS IN COMPUTER SCIENCE

2020-2023

Beirut, Lebanon

Links

GitHub **imanle**

LinkedIn **Iman El Banna**

Coursework

GRADUATE

Advanced-Data Structures and Algorithms

Object Oriented Programming

Database Systems

Operating Systems

Software Engineering

Data Science

Parallel Computing

Statistics and Probability

Machine Learning

Discrete Structures

Skills

PROGRAMMING

Python • R • Java • C/C++ • HTML/CSS

• CUDA • Dart • MySQL • data cleaning

• data mining

MISCELLANEOUS

Shell • \LaTeX • Firebase • Git • Jupyter

Notebook • Mathplot • Matlab •

Pandas library • numpy library

Projects

QUIZUP APP

March 2021 – April 2021

Lebanon, Beirut

- Developed a multiplayer game using flutter in which two randomly assigned players compete against each other to test their knowledge on certain topics and win points. Players can also check their rank on the leaderboard. The game works on all android devices.

- Worked in a group of four

- Frontend: Dart Backend: Dart Database: Firebase

DATA SCIENCE PROJECT

Nov 2022 – Dec 2022

Lebanon, Beirut

- Using R, Python, and a used vehicle's dataset, we found the most important features in the dataset and predicted the price of used vehicles.

DRAYFUS WAGNER ALGORITHM

Sep 2022 – Dec 2022

Lebanon, Beirut

- Implemented the Dreyfus Wagner algorithm and parallelized it on the GPU.

- This algorithm is used to solve the Steiner Tree problem (find a tree (Steiner Tree) of minimum total weight that includes all the terminal vertices)

Competitions

COMPETITIVE PROGRAMMING

LCPC

April 2020

Lebanon, Beirut

- Participated in the 2020 Lebanese Collegiate Programming Competition (LCPC) Participate in sessions involving solving problems on various topics.

Projects Now

MACHINE LEARNING PROJECT

Present day

Lebanon, Beirut

We are given a dataset and our task is a classification problem where the goal is to distinguish between a signal process where new theoretical Higgs bosons (HIGGS) are produced, and a background process with identical decay products but distinct kinematic features.

PARALLEL KEYWORD SEARCH ON KNOWLEDGE GRAPHS

Present day

Lebanon, Beirut

Currently implementing a 2-stage parallel algorithm where, given a query, we extract and rank the Central Graphs found.