**Technical Skills:** Python (Pandas, Matplotlib, Keras, TensorFlow, Scikit- Learn, NLTK, Numpy, Seaborn), **Machine Learning** (Random Forest, Decision Tree, K- Nearest Neighbors, Naïve Bays, Linear & Logistic Regression), **Deep Learning, SQL, Tableau, Feature Engineering, Web Scraping** (Beautiful Soup, Auto Scraper), **C++**, **MATLAB, MS Office** 

#### **EDUCATION**

#### American University of Beirut, Lebanon

Bachelor of Engineering in Chemical Engineering | Class of 2021 | 3.02 GPA

Olayan School of Business | Minor Degree in Business Administration | 3.70 GPA

# International College, Beirut

Class of 2015 | Lebanese Baccalaureate Diploma in Life Science |

# **EXPERIENCE**

# Beirut Al AGRI- Hackathon | Data Scientist | 1/2021 - 1/2021

- Designed a prototype that detects Varroa parasite on bees entering their hive using wide-lens camera and a convolutional neural network, with 99% accuracy.
- Created a marketing strategy and business model by studying the local honey/ beekeeping industry and understanding consumer behavior.
- Our team won 4<sup>th</sup> place from 45 teams and was nominated for the AgryTech Accelerator Program, an initiative that supports Green AI local startups.

#### **PepsiCo S.M.L.C** | Maintenance Engineer Intern | 6/2019 – 8/2019

- Conducted a research project on the feasibility of installing a heat pump to reduce steam consumption in heating applications, which could decrease operation costs by \$800,000/ year.
- Collected heat consumption data on 16 steam lines using process modelling in Aspen HYSYS along with live measured data, which were used to calculate annual steam and fuel consumptions of the current plant.
- Presented results to manufacturing operations head and wrote an executive summary detailing the obtained results and economic analysis.

#### **ALLCHEM** | **Planner Engineer Intern** | 10/2020 – 12/2020

- Designed a production schedule to minimize the cost of producing a new hand sanitizer line amid increased market demand due to COVID- 19.
- Gathered warehouse, manufacturing and sales forecast data in a spreadsheet and performed integer linear programming and optimization techniques.
- Successfully decreased weekly operations cost by 23%.

# **EXTRACURRICULAR ACTIVITIES**

#### **AUB Chess Club** | President | 9/2017 – 1/2019

- Founded and captained the AUB Varsity Chess Team that went on to win several university tournaments and compete at the national level.
- Hosted chess workshops and organized 3 tournaments for 50+ participants.

#### Genius MAP | Chess Coach and Instructor | 1/2019 - Present

 Conducted chess lessons and designed a learning curriculum for 30 students at Genius MAP, a brain development program for gifted children.

## AICHE Student Society | Committee Leader | 9/2017 – 1/2019

• Guest speaker at internship programs and technical lectures, organized student gatherings and bake sales to raise money for local charities.

## Food Blessed | Hunger- Relief Volunteer and Organizer | 6/2020 - Present

 Organized soup kitchens, prepared cooked meals and food assistance packages for poor families and victims of the Beirut Port explosion.

## AUB Robotics Club | Member | 9/2019 - Present

Attended ML workshops and practiced my knowledge through implementing
projects on different datasets. Participated in a sumo- fighting robot competition
where we built a robot equipped with sensors and programmed using LabView.

## Real Madrid Football Academy | Football Coach | 3/2015 - 4/2015

• Trained aspiring players to improve football skills alongside official Madrid coaches.

#### **PERSONAL INFO**

Mobile: +961 71174062

Email: touficsaridar02@gmail.com LinkedIn: linkedin.com/in/toufics

#### **CERTIFICATES**

Google Data Analytics Professional
Certificate (Anticipated June 1st)

#### Beirut Al Bootcamp Certificate

In collaboration with **Microsoft**, covering theoretical and practical applications in ML, DL, CV, NLP and Time Series Analysis.

## RELEVANT COURSEWORK

Calculus I-III

Linear Algebra

**Probability & Statistics** 

**Numerical Computing** 

**Linear & Non-Linear Programming** 

**Management Information Systems** 

#### **PERSONAL PROJECTS**

# Bee- Varroa Mite Classifier / Colab

Used computer vision and CNN to identify pictures of bees with varroa mite.

## Spotify Music Classifier / Colab

Categorized songs into genres using different classification algorithms based on attributes scraped from Spotify API.

# Medical Costs Predictor / Colab

Predicted annual medical costs of patients and explored correlation between features.

## **LANGUAGES**

English (Native)

**Arabic** (Native)

French (A2 Level Certification)