

# Zahraa Zaiour

## EDUCATION

**Lebanese American University (LAU)**, Beirut, Lebanon — *Bachelor of Science in Computer Science*

Sep 2021 – present

- Main courses: Introduction to OOP, Object and Data Abstraction, Algorithms and Data Structure, Parallel Programming, Machine Learning, Fluid Mechanics, Mathematical Methods for Physicists, Natural Language Processing, Artificial Intelligence.

## RESEARCH EXPERIENCE

**Undergraduate Research and Discovery Program** — *Lebanese American University, School of Arts and Sciences*

May 2022 – May 2023

- Participating in a one-year program that engages undergraduate students in research endeavors under faculty guidance.
- Attended intensive lectures and workshops related to research.

**Research assistant** — *Lebanese American University, School of Arts and Sciences*

Oct 2023- Jan 2024

- Working on a machine learning (utilizing algebraic topology to produce powerful techniques for image analysis) research paper in collaboration with Dr. Abbas Rammal.

**Senior Study** — *Lebanese American University, School of Arts and Sciences*

Jan 2023- present

- Writing my senior research paper under the title of “ A Design of Bayesian Regularization Neural Network to Solve the Model of Accelerating Universe Based Modified Gravity”.

## CONTACT INFO

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81-631984

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## SKILLS

**Technical Skills:** Java, Python, SQL, C, Microsoft Skills, Assembly MIPS, Verilog, HTML, PHP, JavaScript, CSS

**Soft Skills:** accurate, detail-oriented, curious, hard worker, Team-worker- Pianist- Leader- Communicator, tutor, ToT attendee

## Certifications

**Microsoft Innovative Educator-** Dec 2022

Microsoft

**Introduction to AI-** Mar 2023

Zaka AI

**Natural language**

**Processing in Production**

**Using Aws tools-** Feb 2023

Beirut AI

## WORK EXPERIENCE

### **Middle East Airlines (MEA), Beirut — Web Developer Intern**

Jun 2023 - Aug 2023

- Trainee in the Web development section. Got acquainted with HTML, CSS, PHP, and MySQL.

### **Digital Integrated Systems (IDS), Beirut — Web Developer Intern**

Jul 2023 - Sep 2023

- Acquired skills in web development
- Contributed to creating a full-stack website for the IDS academy using HTML, CSS, and JavaScript for my frontend. PHP and MySQL for my backend.

### **LAU Simulation Models, Model Arab League (MAL), Beirut — Trainer**

Sep 2023 - Present

- Training, educating, and guiding over 50 high school students attending LAU from all over Lebanon with Arab League-related material in addition to training them with to prepare them for their final conference.
- Taught research methods, diplomacy, conflict resolution, and negotiation.

## PROJECTS

### **Face Mask Detection — parallel programming (CSC447)**

Apr 2023

Used various parallelization techniques (MPI, OpenMP, and Cuda) to parallelize a face mask detection algorithm and run with the highest efficiency possible.

### **Virtual Supermarket Software System — Software Engineering (CSC490)**

Apr 2023

Specified the user and system requirements for a virtual supermarket and implemented the work on a real website with an active database using Oracle.

### **Predicting Sonar Rocks VS. Mines — Machine Learning**

(CSC461)

Apr 2023

Implemented a sophisticated Rock Vs. Mine Classification machine learning model using Python. Trained the model on a large dataset sample to predict rocks from mines accurately.

### **Arabizi Tweets Sentiment Analysis — Natural Language Processing (CSC498B)**

Dec 2023

Trained a model on various machine learning techniques (LR, Naive Bayes, SGD Classifier) to be able to predict the label of our sentiment accurately.

## EXTRACURRICULAR ACTIVITIES

### **NGO MMKN, Beirut - tutor**

Sep 2022 - Dec 2022

Volunteered to tutor physics to grade eight public school students.

### **LebNet Wit Fellows**

**Program, member**

Nov 2022 - May 2023

### **Annual Robotics Competition (ARC), Event Organizer**

May 2023 - present

## LANGUAGES

Arabic: Native or bilingual proficiency, English: Full professional proficiency.

