

## MATHILDA KHALIL

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Hrajel, Lebanon

### EXTRA-CURRICULAR ACTIVITIES

- Member of the Robotics Club and Artificial Intelligence at LAU.
- Professional division one basketball player.

### SKILLS & ABILITIES

- Java, Python
- Arduino, Ross
- MATLAB, Simulink
- P-spice, Quartus
- Solidworks (CSWA certified)
- AutoCAD

### PERSONAL INTEREST

- Basketball
- Robotics
- Coaching

### LANGUAGES

- Arabic - Fluent
- English - Fluent
- French - Intermediate

### CERTIFICATIONS

- Alison courses: Signal Conditioning in Mechatronics (Jan 2023), Machine learning (Dec 2022).
- CSWA Solidworks mechanical design (Oct 2022).
- Machine Learning bootcamp: Completion of the hands-on, real case and data using machine learning (Feb 2022).

## EDUCATION

### LEBANESE AMERICAN UNIVERSITY, LEBANON. 2019 - PRESENT

Bachelor of Engineering in Mechatronics Engineering, GPA: 3.5

- Life Scholarship: for keeping a high academic standing.
- Baccalaureate Scholarship: awarded for excellent scores on the official Baccalaureate.
- Dean of Engineering's Distinguished List: placed for maintaining a cumulative GPA above 3.5/4.

### COLLEGE SAINTE LOUISE, AJALTOUN, LEBANON 2017 - 2019

Lebanese Baccalaureate 2, General Sciences Section., AVG 16.5

## EXPERIENCE

### BASKETBALL CAREER

2011 - PRESENT

- Professional division one player with more than ten rewards.
- Taking part in the U18 national team.
- Coached various basketball teams.

### ACADEMIC PRIVATE TUTOR

2020 - PRESENT

- Tutored Mechatronics Engineering Students at LAU in Computer programming, Computer Aided Design, Control System and Calculus.
- Supported more than 25 elementary and secondary students academically in Math and Physics.

### RECEPTION AT INTERCONTINENTAL- FAQRA

2019 till 2022

- Served guests and managed all aspects of their accommodation.

## TECHNICAL PROJECTS

### Fryer temperature controller

FALL 2022

- Designed a temperature controller.
- Derived the block diagram using MATLAB and Simulink.
- Implemented lead lag compensators and fuzzy logic.

### HELICOPTER HEAD ROTOR SYSTEM

FALL 2022

- Designed fully working motor system using Solidworks.
- Analyzed the study of motion, sustainability and simulation of the design.

### SMART VACUUM CLEANER

FALL 2022

- Built a line follower and cleaner robot.
- Implemented using Arduino with the usage of PID controller.

### AUTOMATED HOME

SPRING 2022

- Built an automated home, deriving mathematical and states equations.
- Implemented the design using LabView and Arduino.

### INTELLIGENT PUBLIC TOILET

FALL 2021

- Designed a fully working intelligent toilet with color detector.
- Implemented using Quartus and logic gates.