

# MOHAMMAD BASHAROUSH

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## EDUCATION:

### B.E in Mechanical Engineering

*Lebanese American University, Byblos*

CGPA = 3.85

2020 - Present

Expected graduation date: 2024

### Lebanese Baccalaureate in Life Sciences

*National Evangelical School in Nabatieh*

2018-2020

## INTERNSHIP

### Association of Energy Engineers - Intern in Energy Storage

July 2022 - August 2022

- Completed the necessary calculations and design to determine the required design of the Solar PV array and solar thermal plant needed for the drying of fruits.
- Designed a heat exchanger that would provide air at the appropriate temperature, and simulated the fluid flow and temperature distribution variation using Ansys.
- Attended Masterclasses on different topics related to sustainability and CFD

## PROJECTS:

### 2D Heat Transfer Conduction Model

- Created a MATLAB script that studies and calculates the flow of heat within a Sous Vide Machine. 2022
- Studied the transient and steady-state considerations of the model, and verified the results using SolidWorks Thermal Simulations

### Kinematic Analysis of Automated and Manual Car Window Regulators

2022

- Designed models of different car window regulators based on various patents of automatic and manual designs using SolidWorks.
- Conducted a kinematic analysis of the movement of the linkages using the simulation tools within SolidWorks.
- Analyzed the movement of a four bar linkage using a MATLAB script.

### 6 Cylinder Radial Engine

2021

- Modeled a design of a 6 cylinder radial engine using engineering blueprints found online using SolidWorks
- Conducted a motion analysis on the engine to calculate the compression factor of the cylinders.
- Analyzed the structural integrity of the cylinder, based on the torque created by the crankshaft.

## SKILLS:

- Skilled in various Programming & Scripting Languages: **HTML, CSS, Python, and Kotlin.**
- Experienced with various 3D and CAD Software as well as simulators, including:
  - CAD : **SolidWorks, AutoCAD, Autodesk Fusion 360, and Siemens NX.**
  - Simulation Software: **Ansys, SimScale, and SolidWorks Simulation.**
  - Electronic and Digital Circuits: **Eagle Circuits, LabVIEW.**
- Proficient in **MATLAB**
- Fast learner, problem solver, and detail oriented. In addition to being, a team worker with refined communication skills.

## COURSES & CERTIFICATES:

- Numerical Methods for Engineers** 2022  
*The Hong Kong University of Technology and Science*
- Specialization in Python for Everybody** 2022  
*University of Michigan*
- Aerial Robotics** 2022  
*University of Pennsylvania*
- Supervised Machine Learning: Regression & Classification** 2022  
*Stanford Online & DeepLearning.ai*
- CSWA in Mechanical Design** 2021  
*Dassault Systèmes*