

# ABBAS FATTAH

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## EDUCATION

### Lebanese American University

BE Mechanical Engineering *GPA: 3.74/4.00* (With Distinction)

Minor in Computer Science

Beirut, Lebanon

Sep 2017 - May 2022

## WORK EXPERIENCE

### EMDC Group

*Part-time Mechanical Engineer*

Jal El Dib, Lebanon

Feb 2022 - Apr 2022

- Designed and edited engineering drawings related to HVAC, plumbing, and fire protection systems for the upcoming Riyadh Metro

### Association of Energy Engineers

*Mechanical Engineering Intern*

(Remote)

Jul 2021 - Aug 2021

- Proposed different lighting designs for the LAU tennis court that would increase energy efficiency by at least 40% while staying under the assigned budget
- Designed a smart energy management system for residential buildings to analyze real-time data for electricity, gas and water

### CIJE

*Project Construction Intern*

Jabriya, Kuwait (Remote)

Jun 2021 - July 2021

- Gained intensive knowledge of different construction tasks, ranging from procurement and scheduling to piping and structural design and commissioning
- Utilized 3D design (Navisworks) and project management (Primavera) software to monitor the project's process

### LAU Residence Halls

*Resident Assistant*

Byblos, Jbeil

Sep 2019 - Dec 2021

- Counseled peers on career, academic and personal concerns, especially during the time of challenging events happening in the country
- Maintained continuous contact with the residence halls administration and provided daily updates regarding the dorm's status

## FINAL YEAR PROJECT

### Automatic Intelligent Cutter for CNC Machine Compensation (*SOLIDWORKS, ANN, CNN, Python, MATLAB, AutoCAD*)

Designed a smart-cutting tool box that moves the cutting tool using piezoelectric actuators to compensate for flank tool wear. The flank tool wear was calculated using empirical formulas, artificial neural networks and convolutional neural networks based on force signals received by strain gauge sensors.

## EXTRACURRICULAR

### KLNA Lebanon

*Communications Team Member*

Beirut, Lebanon

Apr 2021 - Present

- Prepared content for the organization's social media platforms to attract local and international donations from tens of countries around the world
- Maintained a line of communication with international donors to ensure the safe delivery of hundreds of over the counter and prescription medication

### MMKN Foundation

*Physics Tutor*

Beirut, Lebanon

Mar 2021 - May 2021

- Guaranteed the success of 90% of two eighth grade classes by teaching them physics classes to help them prepare for final year exams

### Lebanese Red Cross Youth Department

*Volunteer*

Beirut, Lebanon

Jul 2016 - Aug 2017

- Organized and participated in community outreach and campaign activities related to environmental and drug awareness

## SKILLS

Design Softwares: AutoCAD, SOLIDWORKS

Programming Languages: JAVA, Python, MATLAB, SQL

Other: Simulink, myRIO, Computational Fluid Dynamics, Finite Element Analysis, LabVIEW

## CERTIFICATIONS

Introduction to TensorFlow for AI, Machine Learning, and Deep Learning

Coursera

Convolutional Neural Networks in TensorFlow

Coursera