

Ali Diab

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EDUCATION

Al-Maaref University <i>Bachelor of Engineering, Mechanical Engineering</i>	Beirut Sep. 2019 – Jul. 2024
CIS College <i>The Specialisation Of Car Electomechanics</i>	Beirut Oct. 2022 – Dec. 2022
Al-Maaref University <i>Residential Plumbing Systems</i>	Beirut Aug. 2022 – Sep. 2022
Al-Maaref University <i>Hourly Analysis Program "HAP"</i>	Beirut Apr. 2024 – Apr. 2024

EXPERIENCE

Operator <i>SOMP s.a.l.</i>	Aug 2022 – Sep 2022 Beirut
<ul style="list-style-type: none">Worked with different machines like turning and lathe machines.Learned how to measure and understand tolerance levels and their impact on the production process, ensuring product quality and precision.Gained a clear understanding of the manufacturing process and developed problem-solving skills to address issues during production.	
Startup Business Founder <i>3D Rave</i>	May. 2022 – Present Startup Business
<ul style="list-style-type: none">Managed a 3D printing and modeling service, handling operations, accounting, marketing, and production.Built a wide professional network across multiple fields.Developed advanced skills in 3D modeling using SolidWorks and other CAD programs, focusing on optimizing designs for 3D printing, ensuring printability, and reducing production costs.Completed over 100 custom 3D printing and modeling projects, providing unique and personalized products.	
Quality Control <i>3D Rave</i>	Nov 2024 – Dec 2024 Beirut
<ul style="list-style-type: none">Supervised the production of a camera-related product, including designing two prototypes, testing their functionality, and overseeing the large-scale production process.Ensured the quality of the product by monitoring the manufacturing process and verifying the accuracy of component measurements.Utilized turning machines, laser-cut CNC, and SolidWorks to design and manufacture the prototypes and final product.	
Tennis Coach, Maintenance Manager and Consultant <i>STA Academy</i>	Oct 2019 – Oct 2023 Beirut
<ul style="list-style-type: none">Supervised projects at the tennis academy, including court repairs and wooden constructions.Established and developed tennis racket restoration services, including restringing, grip replacement, and painting.Served as a tennis coach for 3 years, certified by the ITF, gaining strong communication skills and experience working with diverse clients and teams.	
Project Supervisor <i>Al-Maaref University</i>	Feb 2024 – May 2024 Beirut
<ul style="list-style-type: none">Supervised three teams of engineering students in designing and developing prototypes, applying Mechanics of Materials principles, and utilizing 3D printing and commercial materials to meet project goals and timelines.	

PROJECTS

Arm Robot | *SolidWorks, Arduino, 3D Printing*

- Designed an arm robot in SolidWorks, applying mechanical laws correctly and optimizing for 3D printing tolerance, while selecting suitable bearings, screws, and step motors.
- Integrated Arduino technology for system control, with careful wiring path routing to ensure smooth operation.
- Achieved the design specifications, balancing aesthetics, durability, and functionality.

Brush-less Motor Control | *SolidWorks, Stress analysis, Flow simulation, 3D Printing*

- Designed a frame for guide parallelism, a motor mount with minimal airflow resistance, and an adjustable sensor mount using SolidWorks and FDM 3D printing, incorporating springs for shock absorption.
- Met design specifications, adding wooden supports to reduce vibration, ensuring smooth and safe propeller operation.

SS Kitchen Table | *SolidWorks, Stress analysis, SolidWorks Drawing*

- Designed a durable, practical stainless-steel kitchen table using SolidWorks and my experience at Traboulsi Company, creating a detailed manufacturing drawing to meet all specifications.

Fountain | *SolidWorks, 3D Printing*

- Designed and 3D-printed a fountain to match the 3D Rave logo, incorporating RGB lighting and ensuring laminar water flow with leak prevention.
- Optimized the design using SolidWorks, adjusting plastic density and water channel dimensions, and conducted tests to meet both mechanical and aesthetic requirements.

TECHNICAL SKILLS

Design and CAD Software: SolidWorks, Fusion360, AutoCAD, Shaper3D, Blender.

Manufacturing and Prototyping: CAM SolidWorks, G-code, CNC operation, 3D Printer.

Materials and Structural Analysis:: Mechanics Of Material, Abaqus, Material selection.

Control Systems and Automation:: Matlab, Arduino.

SOFT SKILLS:

Arabic(Native), English(Professional), French(Conversational), Microsoft Office, leadership, Problem-solving