

Rami Taher

ttaher.rami@gmail.com | +961 81639273 | [linkedin.com/in/ramitaher1999](https://www.linkedin.com/in/ramitaher1999)

Education

Beirut Arab University – BE in Mechanical Engineering

Sep 2021 – May 2025

Skills

CAD: SolidWorks, AutoCAD, CATIA V5.

Languages: MATLAB, C++, Ladder Logic.

Analysis: HAP, Pipe Flow Expert, Automation Studio, Autodesk Robot Structural Analysis, HelioScope.

Projects

Plumbing System Design

- Sized and routed supply and drainage lines along with the riser and stack.
- Performed water requirement & drainage calculations.
- Created detailed AutoCAD plans in compliance with the **International Plumbing Code (IPC)**.

HVAC System Design

- Made heating, cooling, and ventilation load calculations using HAP software, **in compliance with ASHRAE standards**.
- Sized and routed ducts using Ductulator and standard limitations.
- Developed detailed CAD plans.
- Air Handling Unit Selection Based on calculations.

Autonomous Robot

- Designed the chassis using engineering principles, selecting appropriate chains, bearings, sprockets, and springs.
- Selected appropriate hardware based on performance requirements and system specifications.
- Developed and implemented Arduino code using Arduino IDE to control robot movements and sensor inputs.

Weight Sorting Machine Ladder Logic/PLC

- Design of Ladder Diagram on Siemens SIMATIC to meet requirements using Timers, Counters and Memories. Alter and Change the Machine on FACTORY IO.

CNC Router

- Designed and assembled a custom CNC router, adapting dimensions and components for specific material constraints.
- Selected and configured stepper motors, drivers, and control board (Arduino + GRBL) for 3-axis motion control.

Autonomous Hybrid UAV

- Calculated the Iterative preliminary design loop for hybrid UAVs based on research papers.
- Drawn a prototype on SolidWorks based on calculations.
- Solved Design flaws not foreseen during the design phase.

Work Experience

Solar Systems Engineer Trainee

EKT KATRANGI (July 2025 – Present)

- Supporting both electrical and structural aspects of solar system design and installation.
- Learning analysis tools including Autodesk Robot Structural Analysis, IDEA StatiCa, and HelioScope; interpreting solar and structural plans.
- Gaining exposure to client interactions and sales insights by working alongside the solar sales team.