Charbel A. El-Hajj



- ✓ charbelelhajj97@gmail.com
- +96171746781
- in linkedin.com/in/charbel-elhajj
- Mazraat Yachuh, Lebanon
- Lebanese

⋈ OBJECTIVE

Highly motivated Mechanical Engineer, looking for the opportunity to build upon my current skills and knowledge in this field and explore new challenges. Works diligently towards the schedule, budget and scope of each project. Passionate for solving problems, organized and ambitious person.

EDUCATION

BE in Mechanical Engineering with a minor in Applied Energy,

American University of Beirut (AUB) May 2020 | Hamra, Lebanon

GPA: 3.49

Lebanese Baccalaureate, General Sciences, *Antonine Sisters School*Jun 2016 | Zahle, Lebanon

PROFESSIONAL EXPERIENCE

Mechanical Estimation Engineer, MAN Enterprise

Nov 2022 - present | Beirut, Lebanon

- Preparation of mechanical work to be estimated by gathering proposals, blueprints, specifications and related documents.
- Identification of labor, material and time requirements by studying proposals, blueprints specifications and schedules.
- Prepare quantity take off from the tender drawings if needed.
- Computing of costs by analyzing labor, material and time requirements.
- Resolving discrepancies by collecting and analyzing information.
- Prepare a comparison sheet and evaluate the quotations received.
- Pricing using Candy CCS Software
- Review the cost estimate with the Manager and if possible, propose value engineering solutions.

Energy Consultant, Ark Energy

Dec 2021 - Aug 2022 | Beirut, Lebanon

- Worked on initiating a digital energy management software and building a sustainable business to deliver Energy Softwareas-a-Service (Energy-SaaS) to large private sector clients.
- Led marketing and business development opportunities, identified leads, conducted sales pitches, developed technical and commercial proposals and implementation roadmap, and supported in closing a 20-year PPA agreement with a lifetime savings of \$11M.
- Assisted in initiating and tendering of business as well as supporting the technical aspects of solar development projects for high valued companies like Nestle, Havelock One, and Baker Hughes.
- Conducted multiple demo sessions for highly appreciated clients to introduce our Digital Energy Software Service arkEMIS.
- Integrated biomass, and wind energy as resources to an existing solar excel PPA model that projects annual savings for both the client and investor.

Trainee, *Almaza Brewery*

Jul 2020 - Aug 2020 | Beirut, Lebanon

- Cataloged inspection documents and verified the PM plans related to the company's utilities.
- Inspected and addressed with Bureau Veritas the utilities' status post Beirut-port incident.

ஓ் SKILLS

Languages: Proficient in Arabic (Native) and English (Fluent) and intermediate in French

Computer Skills: HAP, MS Office, SharePoint, Solidworks, MATLAB, LabVIEW, G-CODE, AutoCAD, Java, Python, Video editing, COMSOL, CES Edupack, Revit, ANSYS, Fusion360, PowerBi, Sketchup, PVsyst, Clockify, Monday board.

Soft Skills: Leadership, Communication, Team working, Time management, Organizational, Detailoriented.



EXTRACURRICULAR ACTIVITIES

"Students for Sustainable Energy for All" Club at AUB,

Secretary and Technical Team Member Sep 2018 – May 2020 Hamra, Lebanon

- Assessed the efficiency and energy needed for four schools as part of the club's project.
- Funded and implemented a solar system in a school located in Rmeish.
- Awarded IDEAS'S2019 MAKER FAIRE by designing a sustainable blenderbicycle.

American Society of Mechanical Engineers (ASME) Club,

Cabinet's Events Supervisor Sep 2018 – May 2020

Third International ASHRAE Conference, Volunteer/Usher Jul 2018 – Aug 2018

≈ REFERENCES

REFERENCES AND ADDITIONAL INFORMATION AVAILABLE UPON REQUEST

- Coordinated with Bureau Veritas and IRI on material inspection, testing and certification.
- Performed gauges calibrations and utilities drawings and P&ID using AutoCAD.
- Developed an action plan completion timeline based on DNVGL inspection report of the brewery.

Research Assistant,

AUB Mechanical Engineering Department Aug 2019 – May 2020 | Hamra, Lebanon

- Performed academic research on organic PV cells and machine learning.
- Summarized and held presentations on both topics to a group of students and professors.

Trainee, Dar Al-Handasah

May 2019 – Jul 2019 | Beirut, Lebanon

 Assisted in projects related to HVAC&R system design, firefighting system design, and plumbing system design using HAP, AutoCAD, and Revit.

Research Assistant,

AUB Mechanical Engineering Department Sep 2018 – Dec 2018 | Hamra, Lebanon

- Conducted material processing with Dr.Mohammad Harb.
- Simulated and held presentations on the effects of different ultrasonic wave-damping mechanisms using COMSOL.

Trainee,

*United Nations Development Programme CEDRO*Jan 2018 – Feb 2018 | Beirut, Lebanon

- Conducted on-site research and estimated the electrical consumption for each surveyed apartment.
- Studied and reported on the eligibility of implementing a shared solar PV and solar hot water systems in an urban setting.

Work-study Program Employee,

AUB Visitor's Bureau

Aug 2016 - May 2019 | Hamra, Lebanon

- Provided extensive guided campus tours to newcomers coming from various cultures.
- Organized events and managed AUB's gift shop transactions.
- Interviewed, recruited, and trained new students at the office.