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Professional Summary

Mechanical Engineer registered with the Saudi Council of Engineers (SCE), with a solid foundation in fire-fighting systems design, HVAC, and plumbing. Practical expertise in designing fire protection systems using AutoCAD and Fire Elite, with knowledge of NFPA standards and hydraulic calculations. Proficient in several software tools, including SOLIDWORKS, HAP, and ANSYS. Open to MEP design roles in firefighting, HVAC, and plumbing systems. Eager to join a forward-thinking company to contribute to its success while gaining hands-on experience and enhancing technical skills.

Experience

MEP Site Engineer Intern

Apr 2025 – Present

Golden Ocean Corporation for Contracting LTD

Project: 600+ Residential Villas – ALFURSAN District, Riyadh, Saudi Arabia

- Supervised plumbing and HVAC piping works, including drainage, water supply, risers, and bathroom connections.
- Checked subcontractor work against approved drawings and ensured compliance before the consultant handover.
- Managed daily site operations, ensured smooth workflow, and reported on work progress.

Mechanical Engineer (Part-time)

Feb 2024 - May 2024

Er-Tek panel factory, Famagusta, Cyprus

- Designed package substations and electrical panels using SOLIDWORKS, focusing on manufacturability with CNC, bending, and punching processes.
- Created optimized designs that boosted sales potential by ~25% and reduced production errors by 30%.
- Improved production efficiency by 20% through collaborative design adjustments and accurate technical drawings.

Online Internship program in HVAC

July 2023 - Sept 2023

The Association of Energy Engineers (AEE) - Lebanon chapter, Online

- Completed masterclasses in mechanical systems, energy efficiency, business, and leadership.
- Participated in HVAC design mentorship sessions and received a certificate of successful completion.
- Gained hands-on experience with Carrier's HAP software, including a load calculation project for a villa based on AutoCAD drawings, focusing on HVAC load estimation and energy cost analysis.

Mechanical Engineer Intern

June 2022 - Sept 2022

Azza Soap factory, Khartoum, Sudan

- Performed routine maintenance on motors and generators, improving operational efficiency by around 20% through cleaning, lubrication, and timely replacement of damaged parts.
- Conducted thorough inspections of the production line using inspection techniques gained from university studies, resulting in a reduction of production defects by approximately 15%.

Mechanical Engineer Intern

Feb 2021 - Mar 2021

Ministry of Energy & Mining, Khartoum, Sudan

- Monitoring routine maintenance and repair activities for equipment such as units.
- Manage and address turbine movement and malfunctions with precision to ensure optimal performance and enhance overall electricity production efficiency from the reservoir.

Education

Eastern Mediterranean University

Mar 2022 - Jan 2024

Bachelor's Degree in Mechanical Engineering (with ABET Accreditation) – Famagusta, Cyprus

- Final grade: 3.28 out of 4 (Honor)

Khartoum University

Oct 2017- Oct 2021

Bachelor of Mechanical Engineering – Sudan, Khartoum

Computer Skills

- AutoCAD and Elite Fire
- Hourly Analysis Program (HAP)
- SolidWorks and ANSYS Mechanical
- Microsoft Office package: Microsoft Word, Excel, PowerPoint

Projects

- Piping System Design** May 2022
- Examined major and minor head losses in a pipeline system while modeling water transport in the pipe network.
 - Calculated the pump head, pumping power, and selected a suitable pump for the system.
- Oscillating Wave Converter (OWC)** Jan 2023
- Designed, produced, tested, and validated a prototype of an OWC, a type of wave energy converter.
- Energy Audit: Civil engineering department building (EMU)** June 2023
- Evaluated ECMs, boiler, chiller pumps, air conditioning, and building envelope to give final results of energy analyses and provide energy cost-saving recommendations.
- Fracture Simulation of a Central Edge Crack** June 2023
- Simulated a central crack using COMSOL Multiphysics software and obtained the required results.
- Olive Crushing Machine (OCM)** Jan 2024
- Developed and prototyped an improved OCM by analyzing existing designs and enhancing performance, safety, and usability. The final product met modern engineering standards through effective teamwork and rigorous testing.

Licenses & Certifications

SolidWorks Associate certificates: CAD Design Associate (**CSWA**), Additive Manufacturing Associate (**CSWA-AM**), Sustainability Associate (**CSWA-SD**), Electrical Design Associate (**CSWA-E**), and Simulation Associate (**CSWA-Simulation**).

SolidWorks Professional certificates: CAD Design Professional (**CSWP**), Drawing Tools Professional (**CSWPA-DT**), Sheet Metal Professional (**CSWPA-SM**), Weldment Professional (**CSWPA-WD**).

Certificates of Honor and High Honor: received multiple certificates of honor and high honor in various semesters, awarded by the Mechanical Engineering Department at Eastern Mediterranean University (EMU). 2022 - 2024

Saudi Council of Engineers (SCE): Membership ID: 1054598 Aug 2024

Quality Management System - ISO 9001: 2015 - Lead Auditor preparation course. Oct 2024

Volunteering

Community service Jan 2024 - Feb 2024
Famagusta municipality, *Famagusta, Cyprus*

- Worked in teams to maintain the cleanliness of city streets, parks, and public facilities.
- Demonstrated a strong work ethic and commitment to improving community spaces.

Representative Mar 2019 - Feb 2020
Khotwa Charity Foundation (KFC), *Khartoum, Sudan*

- Volunteered and represented the 017 batch of mechanical engineers.

Language Skills

- Arabic (Native)
- English (professional)