Sally Hussain Omran

Profile

I am a highly motivated, detail-oriented, and diligent individual with experience in SolidWorks and Ansys software for Fluent and stress analysis. Possessing exceptional organizational and communication skills, I can work effectively both independently and as part of a team.

Education

10/2020 - 08/2025

Fayoum, Egypt

Mechanical Engineering

Faculty of Engineering, Fayoum University

- Fully Funded Government Scholarship.
- Graduation Project: Designed and implemented a dual-axis sun tracking system using a microcontroller and stepper motor.
- **Grade:** Excellent (GPA: 3.3).

Professional Experience

10/2023 - present Cairo, Egypt

ASU Racing Team

EVER Technical member in Chassis

- Secure 2nd place overall in Competition, especially 1st place for Autonomous Track.
- Acquire proficiency in technical software such as Autodesk Inventor and CATIA V5.
- Design a steel and aluminum chassis that complies with manufacturing rules.
- Formulate a sub-frame, including a door and hinge mechanism.
- Collaborate with interdisciplinary teams to integrate electrical and mechanical.

12/2023 - present Fayoum, Egypt

3R Heroes Racing Team

Mechanical Head

- Secure 3rd place overall in the Concept Track and the best innovation award.
- Manage an organization with more than 22 members.
- Create a hierarchy, and ensure effective coordination within the organization.
- Participate in the EVER competition as Body Head, and lead a team of 10 members.
- Provide members with tutorials on aerodynamics and race car chassis construction.

06/2024 - 09/2024

Dar Al-Kahrbaa

Cairo, Egypt

- MEP Internship • Secure 2nd place in round 4 Mechanical for HVAC, Fire Fighting, and Plumbing.
- Select HVAC equipment and Air Distribution systems.
- Become acquainted with firefighting and plumbing systems.
- Apply everything to a 3D model with Revit software.

02/2024 - 03/2024

Al Motahida Automotive Service Center

6 October, Egypt

Automotive Internship

- Familiarize myself with techniques in automotive repair.
- Classify between various ignition systems, including electronic and Distributorless.
- Acquire additional information about automotive fault diagnosis.

09/2023 - 10/20236 October, Egypt

RPM: Nile University

Robotics Project (Line Follower)

- Design and assembly of a line follower robot, integrating both mechanical and electrical components.
- Develop the robot's base structure, including motor and wheel assemblies, using SolidWorks.

• Integrate electrical components, including sensors, connectors, and an Arduino Uno, into the overall robot design.

07/2022 - 08/2022 Cairo, Egypt

The Arab Contractors

Internship

- Acquire fundamental knowledge in Mechanical Engineering.
- Demonstrate proficiency in assembling and disassembling engines, including Otto and Diesel engines.
- Understand the functioning of engines.
- Familiarize oneself with tools and their applications in the mechanical field.
- Gain insight into Internal Combustion Engines (ICE).

Skills

CAD

- Solidworks
 - Assembly, Drawing, Dynamic Simulation, Sheet Metal Weldement and Surface.
- Inventor
 - 3D Sketch, Skelton, Frame generation, Drawing, and Stress Analysis.
- AutoCAD
 - 2D Sketch, Layout, AutoFluid, Fluid System Design, and Analysis.

Ansys

Fluent, CFD, CFX, Mechanical Structures, and Thermal Analysis

Certificates

A Hands-on Introduction to Engineering Simulations

Cornell University

Mechanical Design (CSWA, CSWA-AM, CSWA-E, CSWP) $\ \ \, \Box$

Dassault Systemes

MEP Internship ☑ Dar Al-Kahrbaa

Applied Computational Fluid Dynamics 2

Siemens

Robotics Course: Mechanical Design 🖸

RPM: Nile University

AAKRUTI Global 2024 Competition ☑

AAKRUTI Global

Languages

Arabic	English	French
Native	B2	A2

Research Projects

01/2024 - present

"Age and Gender Effects on Thermal Comfort in Radiative Cooling-Based Sleeping Pods: A Comparative Study"

Sally Hussain, Omar A. Ismail, Ahmed M. Ali, Federica Fiacco, M. A. Hassan Research project in collaboration with numerous international prestigious institutions like the City University of Hong Kong, the University of Waterloo, and Carleton University in Canada,

The project is prospected to be published in Energy and Buildings with the (IF=6.7).