

Ghada Hamza

+201003105124

Ghada.i.hamza@gmail.com

El-Nozha, Heliopolis, Cairo

Profile

As a dual career professional, I hold a degree in mechanical engineering with a special interest in materials science and have experience in conducting material research.

Additionally, I am a creative content creator with a passion for writing and multimedia production.

Education

2014-2019 ***The University of Nottingham BEng (Hons) Mechanical Engineering- Good (2:2)***

- The course focused on several mechanical engineering aspects including materials, thermodynamics, Aerospace Engineering, computer modeling techniques, and stress analysis.
- Modules Include Energy Efficiency for sustainability (Excellent-1:1). Stress analysis techniques (Excellent -1:1). Computer modeling techniques (Very good 2:1). Materials in Design (Very good-2:1). Graduation individual project: electrically and thermally conductive Fiber Reinforced PU (Very Good-2:1)

2011-2012 ***The University of Manchester Engineering and physics sciences foundation year- Excellent (1:1)***

- Established a good ability to work in a team during the process of preparing several group reports and presentations.
- My English Language has greatly improved during the process of learning and communicating only in English for months.
- Strengthened my time management skills

2008-2011 ***El-Nasr Girls College, Alexandria***

- A-Level Mathematics –Grade A
- GCSEs:8 (5A*,2A,1B)
- Including Accounting, Business, English (as a second language), and Arabic (As a first language), with grades of A*, A, B, and A* respectively.

Work experience

August 2021- Present

Materials Engineering and Renewable Energy RA at the American University of Cairo

April 1st- present

YMS Co-founder, head of content creation and service delivery

2020- present

Content creator & copywriter Freelancer

March 2020 to September 2020

CSR & Technical support at Optimum, US (UXCenters)

October 2020 to October 2021

CSR & Sales Representative at AT&T, US (Sunderland, Alexandria Egypt)

Feb 2022 to Dec 2022

Negotiator at Sirius XM, CA (Concentrix)

Loyalty department

Jan 2023 to June 2023

Cold caller & lead qualifier at WCR, ROI US, WFH

Courses and training

October 2021 to December 2021

- Solar Energy Basics- Coursera
- Materials Science: 10 Things Every Engineer Should Know- Coursera
- Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading-Coursera
- Mechanics of Materials II: Thin-Walled Pressure Vessels and Torsion
- Mechanics of Materials III: Beam Bending- Coursera Aerospace materials- Coursera
- Learn English: Advanced Grammar and Punctuation Specialization

August 2021- ongoing

Research assistant at the American University in Cairo (AUC)

Carbon Fiber reinforced Aluminum for solar panels

- Trained to prepare Aluminum flake samples.
- Prepared Carbon fiber-reinforced Aluminum samples.
- Used SEM technology to review the microstructure of Materials.
- Conducted tensile-hardness and density testing to evaluate material quality and specifications.

- Conducted compact and high-temperature hot pressing to extrude the material

Winter 2016 to Summer 2017

Carbon Nano Tube (CNT) Reinforced Polyurethane (PU) research graduation project

The aim of the project was to investigate the influence of CNT dispersion on the PU and design an application using the CNT-reinforced PU with the required thermal and electrical conductivities.

- Conducted a research literature review before starting with the project by reviewing 41 research papers.
- Developed an understanding of the methodology used in testing thermoplastic materials.
- Analyzed the data generated by the experiments.
- Identified the percolation threshold to obtain electrical and thermal conductivities.
- Proposed a tea cup holder application using the CNT-reinforced PU.

The report is available on request.

Spring 2016 to Summer 2016

Air Motor Design and Manufacture – Group Project

Extracurricular activities

Summer 2008

A volunteer at an Orphanage, in Alexandria, Egypt

- Developed excellent skills in dealing with children.

Summer 2011

Streets Cleaner and SideWalks Painter Volunteer (The Revolution Volunteers) Alexandria Egypt

- Enhanced my understanding and ability to deal with different people from different backgrounds

Spring 2013

A volunteer at Volunteers for the Environment (2013), Warrington, UK

- Activities done included: Cleaning Paths in the woodlands, planting willows, and using it to make fences and control the water flows in Natural reserves
 - Improved my group working skills and helped me gain more knowledge about the importance of looking after and sustaining green areas and the natural environment
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Additional Skills

- IELTS: 7.00
- Arabic-Native speaker
- Driving
- IT University score: Very good (2:1) **References are available upon request**