

MIRIAM SAID

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Junior Mechanical Design Engineer enthusiastic about innovation, product design and entrepreneurship. A proven track record of delivering projects in a fast-paced environment. Capable in applying technical and business knowledge to engineering problems. Experienced in creating technical requirements to articulate improvement opportunities in design and software roles. Worked as part of a team to deliver innovative solutions including an automated recycling bin design and an electric scooter project. A graduate of the Engineering with Innovation and Entrepreneurship Masters at UCL.

INDUSTRY EXPERIENCE



Web Designer, St Mark Coptic Orthodox Church, London

Mar 2020 – Current

- Applied HTML and CSS to support website design, focusing on feature layouts and maintenance. Collaborating with a team of experienced web developers and software engineers to undertake a complete website upgrade enhancing the usability of features.



Work Experience, DarGroup, Dar Al-Handasah, London

Oct 2015

- Attended cross-departmental design reviews with engineers and architects at the feasibility stage to agree on the direction of the project and assign follow-up actions.
- Supported architects in the wider team by utilising AutoCAD to model housing designs.

Deli Assistant / Barista, Carluccio's, South Kensington, London

Jul 2018 – Mar 2019

Sales Assistant, Zara, White City, London

Jul 2016 – Aug 2016

Sales Assistant, The Perfume Shop, Ealing Broadway, London

Jul 2015 – Oct 2015

EDUCATION



University College London, Engineering with Innovation and Entrepreneurship (MSc) Oct 2020
Predicted Grade: Distinction. Accredited by the IMechE.

Modules include; Materials and Fatigue, Biomedical Engineering, Mastering Entrepreneurship, Entrepreneurial finance, Project Management and New and Renewable Energy Systems.

Individual Thesis - "The Design of The FloBoat, A Floating Beach Wheelchair"

- Designed a CAD prototype and simulated real-life scenarios of a floating beach wheelchair for wheelchair users in the water, on the beach and across additional terrains.
- Conducted user-specific research to develop technical and business design requirements.
- Implemented spiral design approach containing tasks such as, hydrostatics, stability, and material selection to identify the optimal material, composites and lay-up directions.
- Created a comprehensive CAD model on SolidWorks that was further examined using Finite Element Analysis (FEA) software's (ANSYS and SolidWorks Design Study) to simulate real-world mechanical stresses, identify weaknesses and optimise the final structure.
- Compiled manufacturing and business plans to assess the financial feasibility of the FloBoat product, yielding healthy gross margins and a positive 5-year forecast of the product.

Group Innovation Project - "The Design of an Automated Recycling Bin"

- Led a team of engineering students to create an automated recycling bin design.
- Responsible for the design, modelling, analysis and image recognition of the automated bin using programming, CAD and FEA ensuring the bin functioned correctly and efficiently.
- Configured a Raspberry Pi computer using Python to capture logos/labels to retrieve details of material and recyclability of the disposed of product from a Google API.



Cardiff University, Mechanical Engineering (BEng)

Jun 2019

Achieved Grade: 1st Class Honours. Accredited by the IMechE.

Participated in multiple design and innovation projects alongside key engineering modules such as: Fluid Mechanics, Solid Mechanics, Dynamics, Thermodynamics, Renewable Energy Systems, Manufacturing Systems and Object-Oriented Computing (C++ and MATLAB).

Individual Dissertation - "The Finite Element Analysis of a Tidal Turbine"

- Enhanced the internal blade design of a Horizontal Axis Tidal Turbine (HATT) by investigating simulated CFD water pressure data and using ANSYS static structural and ACP(Pre/Post) to determine a suitable material, internal structure and composite layout.

The Cardinal Wiseman Sixth Form, A-LEVELS & GCSES

Jun 2014 – 2016

A-Levels (A*- B): Math's, Further Math's, Physics | GCSE's (A*- B): Including Maths and History

POSITIONS OF RESPONSIBILITY



Teach Church Sunday School to year 8 children

2019 – Current

Volunteered in Maseno & Nairobi, Kenya

Jun 2017/2019

- Donated medical equipment to hospitals whilst providing clothes/food to local villages.
- Assisted with building churches in rural villages, including plastering and painting walls.
- Gained knowledge and insight on challenges endured by citizens of a developing country.

Tutored young adults in A-Level mathematics

2014 – 2016