Karim **Elbehiri**

Phone: +44 749 3456186
Email: karim.elbehiri@hotmail.com
Address: John Dalton St, Manchester, England, UK
LinkedIn: https://uk.linkedin.com/in/karim-elbehiri

EDUCATION

MSc Thermal Power & Fluid Engineering (Distinction) **Sep 21 – Sep 22**
University of Manchester

- Investigated advanced computational fluid dynamics (CFD) and heat transfer techniques.
- Tackled complex problems in fluid dynamics, thermodynamics, combustion, and power.
- Self-taught about race car aerodynamics, vehicle dynamics and thermal performance analysis.

BEng Mechanical Engineering (First Class) **Sep 18 – Jun 21**
University of Sheffield

- Studied about manufacturing, structural dynamics, material analysis & renewable energy.
- Acquired mathematical knowledge in engineering modelling and numerical methods.
- Gained hands-on experience from 18 unique lab experiments.

EXPERIENCE

Aerodynamics Engineer **Sep 21 – Sep 22**
Manchester Stinger Motorsports

- Implemented innovative ideas in the car aerodynamics of the SAE team.
- Developed, designed, and optimised the front and rear wings of the car in SolidWorks.
- Produced industry standard engineering drawings of the front and rear wing.
- Conducted and supervised on 10 CFD simulations of the newly design structures in ANSYS Fluent to minimise the drag and increase the downforce.

CFD Engineer **Sep 21 – Sep 22**
Hyperloop Manchester

- Designed, developed, and optimised the outer shell pod design of the hyperloop.
- Generated original ideas for the outer shell design and built CAD model designs in SolidWorks.
- Acquired new experience in manufacturing and wind tunnel testing techniques.
- Performed 16 CFD simulations using 4 unique shell designs to minimise the drag coefficient and achieving a smoother air flow around the pod. Communicated results to the team.

Mechanical Design Engineer **Sep 19 – Jun 20**
Project Kestrel

- Designed part of a drone that delivers medical equipment and supply between hospitals and rural settlements in Africa. Presented for a team, more than 20 people, prototype design for the drone.
- Co-ordinated and planned meetings with other team members to complete the drone design.

EXTRA COURSES

ANSYS CFD Simulation courses

- Attained new knowledge and understanding of how to use ANSYS Fluent to conduct diverse types of simulations ranging from turbulent flow analysis to convective heat transfer in 2D and 3D.
- Researched and simulated internal flow (through pipes) and external flows (over and around bodies) which helps in determining the outcome before running real experiments.

General Electric Virtual Experience

- Learnt about how to optimize a design to meet customer requirements, how to supply a reliable mix of power to the grid, and how to ramp up production for medical equipment during a surge of demand.

Carbon Literacy Project

- Took part in a 5-week course about the impacts of everyday activities on climate change and the ability and motivation to reduce CO2 emissions on an individual, community, and organisational basis.
- Gained confidence to communicate Carbon Literacy to others and motivate them to act.

TECHNICAL SKILLS

CAD modelling	FEA & CFD simulation	Coding & Programming	MS Office
Fusion 360	ANSYS	Swift	PowerPoint
SolidWorks	OpenFOAM	C++	Word
AutoCAD	Star-CCM+	Python	Excel
CATIA		JavaScript	
FPGA programming	**MATLAB Simulink**	**AI & Machine Learning**	**Windows & Linux OS**
LabVIEW			