

AIDA MANZANO KHARMAN

DESIGN ENGINEERING STUDENT

✉ aida.manzano-kharman17@imperial.ac.uk ☎ +447514950886

All projects can be found here: 🔗 www.aidamanzano.com

EDUCATION

Imperial College London Sept. 2017 – June 2021
Design Engineering

1st Year: (2:1)

Mathematics, Electronics, Computing, Mechanics,
Thermodynamics, Production and Materials.

2nd Year: (2:1)

Mechanics (**81.9%**), Computing, Big Data, Electronics
(**71.8%**), FEA, Mechatronics, Politics.

3rd Year: (2:1)

Robotics, Optimisation, Additive Manufacturing, Audio
Experience Design, Digital Twin, Business, Placement
(**70.4%**).

King's College Madrid Sept. 2016 – June 2017
A Levels

A*, A, A, A, B

Spanish, Mathematics, Further Mathematics, Fine Art,
Physics.

RELEVANT EXPERIENCE

Festival UK* 2022 November 2020 – Ongoing
R&D Consultant

- The Festival will commission projects of large-scale acts of public engagement that will showcase the UK's creativity and innovation to the world.
- I am the sustainability and engineering consultant of the Superflux creative team.

U:CAAN April 2020 – Ongoing
Computer Vision Engineering Intern

- Developed a real time image recognition system to sort recycling waste on a Raspberry Pi training the YOLOv3 algorithm on a custom dataset.

Imperial College London August 2019 – Sept. 2019
Robotics Undergraduate Researcher

- Developed a prototype for a reconfigurable tetromino robot.
- Will be the platform used to test the concept of nested reconfiguration and swarm robotics.

Demand Energy Equality August 2019 – Ongoing
Solar Panel Workshop Coordinator

- Selected to receive training and became the youngest workshop coordinator at the organisation.
- Ran DIY solar panel charger workshops at Imperial College in collaboration with Energy Society, and Watts Next NGO. Donated solar panels to refugee camps.

PATENT

27 March 2018

1st Author: Vertical Axis Fractal Wind Turbine
Es - P. 201631253

Full abstract can be found on Espacenet.

SKILLS

Programming

Python

OpenCV, Flask APIs, image recognition algorithm training (Darknet), YOLO deployment on Raspberry Pi, NanPy, PID control and Basic Signal Processing.

Docker

Client server application calling image recognition algorithm.

Amazon Web Services

EC2 and SageMaker experience using custom models.

Prototyping

Solidworks 3D Printing Laser Cutting Soldering

RELEVANT PROJECTS

July 2018 – July 2019

Energy Society

Wind Power Project Manager

- Leader of a team of 6, completed the building of a full scale, functioning Horizontal Axis Wind Turbine.
- Displayed the turbine at the Great Exhibition Festival with 60,000+ attendees.

LANGUAGES

Spanish • Native

English • Native

French • B2 Common European Framework Level

Arabic • B2 Common European Framework Level

AWARDS

Creative Conscience Award

- Awarded Gold in the Product and Structural Design category of the worldwide competition Creative Conscience for a game controller for the visually impaired.

Founder's award

- Highest level of award at King's College, awarded by the founder of the school, to the student that has contributed most in both academic and pastoral aspects. Scholarship to begin university studies.