AIDA MANZANO KHARMAN

DESIGN ENGINEERING STUDENT

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

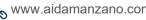
- Developed a prototype for a reconfigurable tetromino robot.
- Will be the platform used to test the concept of nested reconfiguration and swarm robotics.

August 2019 - Ongoing Demand Energy Equality 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.

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



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.

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.