Luis Badesa

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I am an Energy Economist with extensive research experience in the fields of engineering and applied mathematics, with a focus on electricity grids.

January 2020

EXPERIENCE | Energy Economist, Arup (London, UK)

(2019 - present)

Analysis and modelling of future electricity markets for advising public and private clients.

Researcher in Electricity Markets, Imperial College London

(2016 - 2019)

Supervised 5 Master's theses in optimisation and Machine Learning for electricity grids.

Graduate Teaching Assistant, Imperial College London

(2017 - 2019)

Taught core modules in mathematics and computing, in the MEng Electrical Engineering.

Instructor in Robotics, Johns Hopkins CTY (USA)

(Summer 2016)

Taught at CTY's summer camp for gifted middle school students in Los Angeles.

Researcher in Smart Grid, University of Maine (USA)

(2014 - 2016)

Conducted studies on power system stability, in collaboration with Central Maine Power.

Assistant Researcher in Digital Electronics, University of Zaragoza

(2013-2014)

Designed an FPGA-based position sensor for pans on induction cooktops, in collaboration with the engineers at BSH Home Appliances Group.

Intern in Control Engineering, Pyrsa, Monreal del Campo (Spain)

(Summer 2013)

EDUCATION | **PhD in Electrical Engineering**, Imperial College London

(2016 - 2019)

Developed methodologies for optimal scheduling of electricity grids with a high share of renewable generation.

- Published 8 research papers (see my personal website and my ResearchGate profile).
- Recipient of a full scholarship from the Engineering Research Council UK.

MSc in Electrical Engineering, University of Maine (USA)

(2014 - 2016)

- Ranked 1st among students in Electrical & Computer Engineering.
- Recipient of an Iberdrola Scholarship for Postgraduate Studies in Energy & Environment.

BSc in Industrial Engineering, University of Zaragoza (Spain)

(2010 - 2014)

Recipient of a scholarship sponsored by BSH Home Appliances Corporation.

VOLUNTEERING | Secretary and co-founder at IEEE Student Branch, Imperial College

(2018 - 2019)

Organised a research symposium and a full-day conference (see our website).

Research Project Mentor at Upward Bound, University of Maine

(Summer 2015)

Mentored a high school student on a month-long project titled "Optimal Design of an Average-sized One-bedroom Apartment for Better Energy Conservation".

Coordinator for first-year and international students at University of Zaragoza (2012 - 2014)

SKILLS Languages: English (bilingual proficiency), Spanish (native), French (high proficiency).

Computing: Matlab, Plexos, C++, C, VHDL, Pascal, LaTeX. Strong mathematical and computing skills, including optimisation and Machine Learning (see my GitHub).