Daniel Fernández Martínez

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School of Industrial Engineering University of Extremadura Badajoz, Spain danielfm@unex.es

Webpage: dfmaz.github.io Orcid: 0000-0002-1712-7177

Graduate studies

 ${\bf University\ of\ Extremadura,\ Badajoz,\ Spain}$

Master of Science, Simulation in Science and Engineering

Nov' 21

University of Extremadura, Badajoz, Spain

Bachelor of Science, Industrial Electronics and Control Engineering, Erasmus programme: **Bialystok University of Technology** (Poland), SICUE National Exchange programme: **University of Cantabria** (Spain) Jul' 20

RESEARCH INTERESTS

Computational Fluid Dynamics, Bioengineering, Data-Driven Models

Machine Learning, Time Series Forecasting, Reduced Order Models, Optimization

JOURNAL PUBLICATIONS

Jaramillo-Morán, M.A., Fernández-Martínez, D., García-García, A., Carmona-Fernández, D. Improving Artificial Intelligence Forecasting Models Performance with Data Preprocessing:

European Union Allowance Prices Case Study. Energies 2021, 14, 7845. IF: 3.004

DOI: 10.3390/en14237845

CONFERENCE PUBLICATIONS

Fernández-Martínez, D., Jaramillo-Morán, M.A., Carmona-Fernández, D., Rodríguez-Méndez, D. EIIGraph: conexiones Universidad - Empresa mediante la Teoría de Grafos. *II Congreso Ágora Internacional. Educación, Investigación y Empleo.* Nov' 23 - Nov'27, Madrid, Spain

RESEARCH EXPERIENCE

Fluid dynamics technology applied to diagnosis and personalized treatment of highmortality cardiovascular pathologies

Supervisors: Dr. C. Fernández LLera & Dr. R. Agujetas Ortiz

Feb '22 - Present

- Position: Scientific Researcher, Fluid Mechanics Group, School of Industrial Engineering (UEX), Badajoz, Spain
- Funding: Ayudas destinadas a la realización de proyectos de investigación en los centros públicos de I+D+I de la Comunidad Autónoma de Extremadura

Electrical load forecasting with advanced machine learning techniques

Supervisor: Dr. M.A. Jaramillo Morán

Nov '20 - Feb '22

- Position: Research Support Engineer, Group of Industrial Applications of Artificial Intelligence, School of Industrial Engineering (UEX), Badajoz, Spain
- Funding: Ayudas para el fomento de la contratación de personal de apoyo a la investigación en la Comunidad Autónoma de Extremadura

An AI-based recommendation system for "green routes" in sustainable urban environments

Supervisor: Dr. Filippo Bistaffa

Oct '21 - Nov '21

- Position: JAE Intro Fellow, Group of Multiagent Systems, Artificial Intelligence Research Institute (IIIA-CSIC), Spanish National Research Council, Barcelona, Spain
- Funding: JAE Intro ICU Fellowship, Spanish National Research Council
- Renounced due to incompatibility with current contract

	JAE Intro ICU Fellow, Spanish National Research Council (CSIC)	Oct' 21
Awards	Erasmus Grant, European Commission	Sep ' 19
	SICUE National Exchange Programme, CRUE Universidades Españole	as Sep' 18
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Computer	Languages & Frameworks: Python, Tensorflow, Keras, C, R, Java, LATEX	
Skills	OS & other CS tools: Linux, Windows, Git, Docker	
	Engineering software: MATLAB, Fluent, Solidworks	
Trainings	Introduction to 3D printing, University of Extremadura	Jul' 21
	Deep Learning Specialization, deeplearning.io	Mar' 20 - May' 20
	Object Oriented Programming in JAVA, University of Extremadura	Feb' 16 - Jun' 16