Daniel Fernández Martínez

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GRADUATE STUDIES

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,   *Jul' 20*
Erasmus programme: **Bialystok University of Technology** (Poland),
SICUE National Exchange programme: **University of Cantabria** (Spain)

RESEARCH INTERESTS

Computational Fluid Dynamics, Bioengineering, Data-Driven Models
Machine Learning, Time Series Forecasting, Reduced Order Models, Optimization

JOURNAL PUBLICATIONS

Fernández-Martínez, D., Jaramillo-Morán, M.A. Multi-Step Hourly Power Consumption Forecasting in a Healthcare Building with Recurrent Neural Networks and Empirical Mode Decomposition. *Sensors 2022, 22, 3644.* **Q1, IF: 3.576**
DOI: 10.3390/s22103664

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.* **Q3, 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

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RESEARCH EXPERIENCE

Fluid dynamics technology applied to diagnosis and personalized treatment of high-mortality 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

FELLOWSHIPS & AWARDS		
JAE Intro ICU Fellow, Spanish National Research Council (CSIC)		*Oct' 21*
Erasmus Grant, European Commission		*Sep' 19*
SICUE National Exchange Programme, CRUE Universidades Españolas		*Sep' 18*

SEMINARS & TALKS

Fluids in the era of Data: Opportunities and Challenges, UEX — *Apr' 22*

COMPUTER SKILLS

Languages & Frameworks: Python, Tensorflow, Keras, C, R, Java, LaTeX
OS & other CS tools: Linux, Windows, Git
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*