Antonio Alcántara Mata

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Phone: +34 665019751   **LinkedIn**: /in/antonio-alcantara

Research interests   Data-Driven Optimization, Machine Learning, Probabilistic Forecasting

Education

University Carlos III of Madrid   Madrid, Spain
PhD in Mathematical Engineering   Dec 2021 – Present
Director: Prof. Carlos Ruiz Mora

University of Granada   Granada, Spain
Master's Degree in Applied Statistics   Sept 2020 – July 2021
GPA: 9.67/10

University Carlos III of Madrid   Madrid, Spain
Bachelor's Degree in Statistics and Business   Sept 2016 – July 2020
GPA: 9.24/10
Exchange semester at University of Padova (Italy)

Working Papers

Deep Neural Networks for Quantile Estimation of Renewable Regional Energy Production.
Antonio Alcántara, Inés M Galván, Ricardo Aler.

Direct Estimation of Prediction Intervals for Solar and Wind Regional Energy Forecasting with Deep Neural Networks.
Antonio Alcántara, Inés M Galván, Ricardo Aler.

Pareto Optimal Prediction Intervals with Hypernetworks.
Antonio Alcántara, Inés M Galván, Ricardo Aler.

Research experience

Predoctoral Researcher
Director: Carlos Ruiz Mora   Dec 2021 – Present
FPU Fellowship (University Faculty Training programme).

Probabilistic forecasting and meta-heuristic optimization of solar/wind resources in the Iberian Peninsula for a low carbon power system
Mentors: Ricardo Aler, Inés M Galván   Jan 2021 – Nov 2021
Full time Research Assistant funded by the Agencia Estatal de Investigación (PID2019-107455RB-C22).

Teaching experience   **Teaching assistant, Statistics (UC3M)**   Spring 2022

Statistics for Bachelor's in Electrical Engineering
Topics covered: Descriptive statistics, probability, random variables and probability models, statistical inference, hypothesis testing, quality control and regression

<table>
<tr><td>**Honors and scholarships**</td><td>FPU Fellowship (University Faculty Training programme)</td><td>2021-2025</td></tr>
<tr><td></td><td>Extraordinary End of Studies Award (University Carlos III of Madrid)</td><td>2020</td></tr>
<tr><td></td><td>Excellence Award (Social Council, University Carlos III of Madrid)</td><td>2019</td></tr>
<tr><td></td><td>Santander Progreso Scholarship (Santander Bank)</td><td>2019</td></tr>
<tr><td></td><td>Excellence Award (Comunidad de Madrid)</td><td>2018</td></tr>
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Industry experience

Generali A.I.E., Data Office — Madrid, Spain
Data Analyst Intern — Oct 2019 – Feb 2020
Data Cleansing tasks with R for data directories. Cooperation in the design of a relational system for data directories within the framework of data governance and its inclusion into the AXON platform. Statistical analysis of data quality controls.

References

Carlos Ruiz Mora
Statistics Department, University Carlos III of Madrid
Leganés (Madrid), Spain
Email: caruizm@est-econ.uc3m.es

Ricardo Aler Mur
Computer Science Department, University Carlos III of Madrid
Leganés (Madrid), Spain
Email: aler@inf.uc3m.es

Inés María Galván León
Computer Science Department, University Carlos III of Madrid
Leganés (Madrid), Spain
Email: igalvan@inf.uc3m.es

Skills

Programming
Proficient in: R, Python.
Familiar with: SQL, Matlab, Stata, SPSS.

Languages
Spanish (fluent), English (advanced), Italian (basic)