

🎓 Education

Aalto University

PhD. Bayesian Machine Learning

2019 –
Helsinki, Finland

Universidad Autónoma de Madrid

PhD. Machine Learning (transferred out)

2017 – 2019
Madrid, Spain

Universidad Autónoma de Madrid

M.Sc. Machine Learning

2016 – 2017
Madrid, Spain

Universidad Autónoma de Madrid

B.Sc. Computer Science

2012 – 2016
Madrid, Spain

🌐 Experience

Cambridge University, Machine Learning Group

Visiting Doctoral Student

May 2018 – August 2018
Cambridge, UK

Spacemacs

Open Source contributor

2016 – 2017

Universidad Autónoma de Madrid, Grupo de Aprendizaje Automático

Research Intern

2015 – 2016
Madrid, Spain

Aselcis Consulting S.L.

Odoo software developer intern

May 2015 – August 2015

🏆 Awards

FPI Scholarship, Universidad Autónoma de Madrid

2018

> Turned down in favour of a TA position in the Department of Computer Science

General Scholarship for Undergraduate Studies

2012 – 2016

> Spain's Minister of Science, Culture and Education

🎓 Teaching Experience

Software Engineering, Universidad Autónoma de Madrid

Instructor, undergraduate level course

Spring 2019

Software Engineering, Universidad Autónoma de Madrid

Instructor, undergraduate level course

Spring 2018

📄 Journal Papers

IEEE Transactions on Sustainable Energy

Submitted, 2019

> **Catalina A.**, Alaíz C.M., Dorronsoro J.R. (2019). Combining Numerical Weather Predictions and Satellite Data for PV Energy Nowcasting, submitted to IEEE Transactions on Sustainable Energy.

Neural Processing Letters

2019

> **Catalina A.**, Torres-Barrán A., Alaíz C.M., Dorronsoro J.R. (2018). Machine Learning Nowcasting of PV Energy using Satellite Data. Neural Processing Letters (NEPL). DOI: 10.1007/s11063-018-09969-1

International Joint Conference on Neural Networks

July 2019

- Ruiz C., **Catalina A.**, Alaíz C.M., Dorronsoro J.R. (2019). Flexible Kernel Selection in Multitask Support Vector Regression. In 2019 International Joint Conference on Neural Networks (IJCNN), in press.

Intelligent Data Engineering and Automated Learning

November 2018

- de la Pompa V., **Catalina A.**, Dorronsoro J.R. (2018) Gaussian Process Kernels for Support Vector Regression in Wind Energy Prediction. In: Yin H., Camacho D., Novais P., Tallón-Ballesteros A. (eds) Intelligent Data Engineering and Automated Learning – IDEAL 2018. IDEAL 2018. Lecture Notes in Computer Science, vol 11315. Springer, Cham.

Data Analytics for Renewable Energies

September 2018

- **Catalina A.**, Alaíz C.M., Dorronsoro J.R. (2018). Fused Lasso Dimensionality Reduction of Highly Correlated NWP Features. In: Woon W., Aung Z., Kramer O., Madnick S. (eds) Data Analytics for Renewable Energy Integration. DARE 2018. Lecture Notes in Computer Science.

International Joint Conference on Neural Networks

July 2018

- **Catalina A.**, Alaíz C.M., Dorronsoro J.R. (2018). Accelerated Block Coordinate Descent for Sparse Group Lasso. In 2018 International Joint Conference on Neural Networks (IJCNN) (pp. 1-8). IEEE.

European Symposium on Artificial Neural Networks

April 2018

- **Catalina A.**, Alaíz C.M., Dorronsoro J.R. (2018). Revisiting FISTA for Lasso: Acceleration Strategies Over the Regularization Path. In ESANN 2018.

Data Analytics for Renewable Energies

September 2017

- **Catalina A.**, Dorronsoro J.R. (2017) NWP Ensembles for Wind Energy Uncertainty Estimates. In: Woon W., Aung Z., Kramer O., Madnick S. (eds) Data Analytics for Renewable Energy Integration. DARE 2017. Lecture Notes in Computer Science, vol 10691. Springer, Cham.

International Work-Conference on Artificial Neural Networks

June 2017

- **Catalina A.**, Torres-Barrán A., Dorronsoro J.R. (2017) Satellite Based Nowcasting of PV Energy over Peninsular Spain. In: Rojas I., Joya G., Catala A. (eds) Advances in Computational Intelligence. IWANN 2017. Lecture Notes in Computer Science, vol 10305, pages 685-697. Springer, Cham

Data Analytics for Renewable Energies

September 2016

- **Catalina A.**, Torres-Barrán A., Dorronsoro J.R. (2017) Machine Learning Prediction of Photovoltaic Energy from Satellite Sources. In: Woon W., Aung Z., Kramer O., Madnick S. (eds) Data Analytics for Renewable Energy Integration. DARE 2016. Lecture Notes in Computer Science, vol 10097, pages 31-42. Springer, Cham

Frameworks Python, R, \LaTeX , Pytorch, Stan**Editor** Emacs, Vim