Pablo **Moreno-Muñoz**

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POSITIONS		
	Technical University of Denmark (DTU)	April 2021 - Present
	Postdoctoral researcher. Cognitive Systems Section with Prof. Søren Hauberg (DTU Compute)	
	Max Planck Institute for Intelligent Systems	Feb. 2019 - Jun. 2019
	Research intern. Probabilistic Learning Group Supervisor: Dr. Isabel Valera	
	University of Sheffield	Mar. 2018 - May 2018
	Visiting researcher. Probabilistic Machine Learning Group Supervisor: Dr. Mauricio A. Álvarez	
	IMDEA Networks	Oct. 2015
	Student intern. Madrid Institute of Advanced Studies	
	European Space Agency (ESA)	Mar. 2015 - Sep. 2015
	Trainee. European Space Astronomy Center Supervisors: Dr. Tim Rawle and Dr. Bruno Altieri	

EDUCATION		
	Universidad Carlos III de Madrid	Sep. 2016 - Dec. 2020
	PhD student in Machine Learning Signal Processing Group Laboratory Advisor: Dr. Antonio Artés	
	Universidad Carlos III de Madrid	Sep. 2014 - Jul. 2016
	M.Sc. in Multimedia and Communications M.Sc. in Telecommunication Engineering	
	Technical University of Denmark (DTU)	Jan. 2013 - Jul. 2013
	Erasmus Scholarship, Telecommunications Engineering	
	Universidad Carlos III de Madrid	Sep. 2010 - Jul. 2014
	B.Sc. in Telecommunication Technologies	

TEACHING		
	Universidad Carlos III de Madrid	
	Teaching Assistant in Data Modelling	1st Semester 2020
	Teaching Assistant in Probabilistic Modelling and Inference	1st Semester 2019
	Teaching Assistant in Advanced Signal Processing	1st Semester 2018
	Teaching Assistant in Linear Systems	1st Semester 2016

SUMMER SCHOOLS AND OTHERS		
	Machine Learning Frontiers in Precision Medicine (MLFPM), Basel, Switzerland	2019
	Machine Learning Summer School (MLSS), Universidad Autónoma de Madrid	2018
	Data Science Summer School (DS3), École Polytechnique, Paris	2017
	Gaussian Process Summer School (GPSS), University of Sheffield	2017
	Bayesian Optimization Course, Universidad Autónoma de Madrid	2016

TALKS		
	Center for Basic Machine Learning Research in Life Science (MLLS), Copenhagen	2021
	University of Sheffield, Probabilistic Machine Learning Group	2019
	University of Sheffield, Probabilistic Machine Learning Group	2018

	Universidad Carlos III de Madrid, Signal Processing Group	2017
	Secondary School Research Com. Program, Comunidad de Madrid	2016

REVIEWING		
	International Conference on Machine Learning (ICML)	2022
	Artificial Intelligence and Statistics (AISTATS)	2021–2022
	International Conference on Learning Representations (ICLR)	2020, 2021
	Neural Information Processing Systems (NeurIPS)	2019–2021
	Machine Learning for Health Workshop at NIPS	2017–2021
	IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)	2022
	Machine Learning, Springer	2019
	Journal of Machine Learning Research (JMLR)	2018

PUBLICATIONS

P. Moreno-Muñoz, C. W. Feldager and S. Hauberg.
Revisiting Active Sets for Gaussian Process Decoders.
Under submission, 2022.

S. Bartels, K. Stensbo-Smidt, P. Moreno-Muñoz, J. Frellsen,
W. Boomsma and S. Hauberg.
Adaptive Cholesky Gaussian Processes.
Under submission, 2022.

P. Moreno-Muñoz, A. Artés-Rodríguez and Mauricio A. Álvarez.
Modular Gaussian Processes for Transfer Learning.
In Advances in Neural Information Processing Systems 34 (NeurIPS), 2021.

L. Romero-Medrano, P. Moreno-Muñoz and A. Artés-Rodríguez.
**Multinomial Sampling of Latent Variables
for Hierarchical Change-point Detection**.
In the Journal of Signal Processing Systems, MLSP Special Issue, 2021.

P. Moreno-Muñoz, L. Romero-Medrano, A. Moreno, J. Herrera-López,
E. Baca-García and A. Artés-Rodríguez.
Passive Detection of Behavioral Shifts for Suicide Attempt Prevention.
In Workshop in Machine Learning for Mobile-Health (ML4MH)@ NeurIPS, 2020.

P. Moreno-Muñoz, A. Artés-Rodríguez and Mauricio A. Álvarez.
Recyclable Gaussian Processes.
In arXiv:2010.02554, 2020.

L. Romero-Medrano, P. Moreno-Muñoz and A. Artés-Rodríguez.
Multinomial Sampling for Hierarchical Change-Point Detection.
In IEEE Workshop in Machine Learning for Signal Processing (MLSP), 2020.

P. Moreno-Muñoz, D. Ramírez and A. Artés-Rodríguez.
Change-Point Detection in Hierarchical Circadian Models.
In Pattern Recognition, Elsevier, 2020.

P. Moreno-Muñoz, D. Ramírez and A. Artés-Rodríguez.
Continual Learning for Infinite Hierarchical Change-Point Detection.
In International Conf. on Acoustics, Speech and Signal Processing (ICASSP), 2020.

P. Moreno-Muñoz, A. Artés-Rodríguez and Mauricio A. Álvarez.
Continual Multi-task Gaussian Processes.
In arXiv:1911.00002, 2019. *(under review in JMLR)*

P. Moreno-Muñoz, A. Artés-Rodríguez and Mauricio A. Álvarez.
Heterogeneous Multi-output Gaussian Process Prediction.
In Advances in Neural Information Processing Systems 31 (NeurIPS), 2018. (spotlight)

S. Berrouiguet, D. Ramírez, M. L. Barrigón Estévez, <u>P. Moreno-Muñoz</u>, R. Carmona Camacho, E. Baca-García and A. Artés-Rodríguez.
Combining continuous smartphone native sensors data capture and unsupervised data mining techniques for behavioral changes detection: The feasibility study of the Evidence Based Behavior (eB2) platform.
In Journal of Medical Internet Research (JMIR) mHealth and uHealth, 2018.

DISSERTATIONS <u>P. Moreno-Muñoz</u>.
Probabilistic Models for Human Behavior Learning.
Ph.D. Thesis Dissertation, Universidad Carlos III de Madrid. 2021

<u>P. Moreno-Muñoz</u>.
Change Point Detection in Behavioral High Dimensional Data.
M.Sc. Thesis Dissertation (Multimedia and Communications). 2016

<u>P. Moreno-Muñoz</u>.
Anomalous Behavior Detection in Psychiatry.
M.Sc. Thesis Dissertation (Telecommunication Engineering). 2016

<u>P. Moreno-Muñoz</u>. **Photometric Redshift within crowded galaxy fields**.
ESA Project Report. 2015

<u>P. Moreno-Muñoz</u>. **Statistical Learning Costs with Partial Labels**.
B.Sc. Thesis Dissertation (spanish). 2014

OTHERS J. J. Giraldo-Gutierrez, <u>P. Moreno-Muñoz</u>, M. A. Álvarez. **Natural Gradient Optimization for Improving Inference of Heterogeneous Multi-output Gaussian Process Models**, Advances in Data Science, Manchester, 2019 (poster)

<u>P. Moreno-Muñoz</u>, A. Artés-Rodríguez, M. A. Álvarez. **Heterogeneous Multi-task Gaussian Process Learning**, Advances in Data Science, Manchester, 2018 (poster)

GRANTS FPI grant to fund doctoral studies. Ministry of Economy and Industry, Spain. 2016-2020

LANGUAGES **Spanish** – Mothertongue, **English** – Advanced (TOEFL: 100/120), **French** – Basic

REFERENCES Søren Hauberg, Professor at Technical University of Denmark (DTU), Copenhagen.
Antonio Artés-Rodríguez, Professor at Universidad Carlos III de Madrid.
Mauricio A. Álvarez, Senior Lecturer at University of Sheffield, UK.