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POSITIONS **Universidad Carlos III de Madrid** Oct. 2019 - Present

Predoctoral Researcher
Signal Processing Group
Supervisors: Prof. Dr. Antonio Artés Rodríguez
Dr. Pablo Martínez Olmos

University of Cambridge Feb. 2021 - Feb. 2022

Visiting researcher
Machine Learning Group
Supervisor: Dr. José Miguel Hernández-Lobato

Universidad Carlos III de Madrid Feb. 2017 - Sept. 2019

Research associate
Signal Processing Group
Supervisor: Prof. Dr. Antonio Artés Rodríguez

EDUCATION **Universidad Carlos III de Madrid** Oct. 2018 - Present

PhD in Probabilistic Machine Learning
Signal Processing Group
Advisors: Prof. Dr. Antonio Artés Rodríguez
Dr. Pablo Martínez Olmos

Universidad Carlos III de Madrid Sep. 2016 - Jul. 2018

M.Sc. in Multimedia and Communications
M.Sc. in Telecommunications Engineering

Universidad de Granada Sep. 2012 - Jul. 2016

B.Sc. in Telecommunications Engineering

TEACHING *Advanced Machine Learning and Feature Engineering* 2022

BBVA, Fundación UC3M

Machine Learning Fundamentals 2020-2022

BBVA, Fundación UC3M

Machine Learning II 2020, 2022

Bachelor in Data Science and Engineering
Universidad Carlos III de Madrid

	<i>Neural Networks</i> Bachelor in Data Science and Engineering Universidad Carlos III de Madrid	2022
	<i>Communications Theory</i> Bachelor in Telecommunications Engineering Bachelor in Sound and Image Engineering Universidad Carlos III de Madrid	2022
COURSES	AI and Machine Learning in Healthcare Summer School <i>Cambridge Centre for AI in Medicine</i> <i>University of Cambridge, UK</i>	Sep. 2022
	Gaussian Process and Uncertainty Quantification Summer School, 2020. <i>University of Sheffield, UK</i>	Sep. 2020
	Machine Learning Summer School (MLSS) <i>Skoltech Institute of Science and Technology, Moscow, Russia</i>	Sep. 2019
	Machine Learning Frontiers in Precision Medicine (MLFPM) 1st Summer School <i>ETH Zurich, Switzerland</i>	Sep. 2019
	Machine Learning Summer School (MLSS) <i>Universidad Autónoma de Madrid, Spain</i> Volunteer staff	Sep. 2018
	Gaussian Process and Uncertainty Quantification Summer School, 2017. <i>University of Sheffield, UK</i>	Sep. 2017
REVIEWING	Artificial Intelligence and Statistics (AISTATS)	2022
	Journal of Machine Learning Research (JMLR)	2022
	Journal of Biomedical and Health Informatics (JBHI)	since 2018
TALKS	<i>Missing Data Imputation and Acquisition with Deep Hierarchical Models and Hamiltonian Monte Carlo</i> Signal Processing Group Universidad Carlos III de Madrid	Jun. 2022

- PUBLICATIONS I. Peis, P. M. Olmos and A. Artés-Rodríguez. **Unsupervised Learning of Global Factors in Deep Generative Models**. In *Pattern Recognition*, vol. 134, p. 109130, 2022. [pdf]
- I. Peis, C. Ma and J. M. Hernández-Lobato. **Missing Data Imputation and Acquisition with Deep Hierarchical Models and Hamiltonian Monte Carlo**. In *Advances in Neural Information Processing Systems 35 (NeurIPS)*, 2022. [pdf]
- I. Peis, J. D. López-Moríñigo, M. M. Pérez-Rodríguez, M. L. Barrigón, M. Ruiz-Gómez, A. Artés-Rodríguez and E. Baca-García. **Actigraphic recording of motor activity in depressed inpatients: a novel computational approach to prediction of clinical course and hospital discharge**. In *Scientific reports*, 10. Nature, 2020. [pdf]
- I. Peis, P. M. Olmos, C. Vera-Varela, M. L. Barrigón, P. Courtet, E. Baca-García and A. Artés Rodríguez. **Deep Sequential Models for Suicidal Ideation from Multiple Source Data**. In *Journal of Biomedical and Health Informatics*, vol. 23, no. 6. IEEE, 2019. [pdf] [html]
- D. Castillo-Barnes, I. Peis, F. J. Martínez-Murcia, F. Segovia, I. A. Illán, J. M. Górriz, J. Ramírez, D. Salas-Gonzalez. **A Heavy Tailed Expectation Maximization Hidden Markov Random Field Model with Applications to Segmentation of MRI**. In *Frontiers in Neuroinformatics*, 11, 66, 2017. [pdf]
- I. Peis, I. A. Illán, F. J. Martínez-Murcia, F. Segovia, J. M. Górriz, J. Ramírez, E. W. Lang & D. Salas-Gonzalez. **MRI brain segmentation using hidden Markov random fields with alpha-stable distributions**. In *IEEE Nuclear Science Symposium, Medical Imaging Conference and Room-Temperature Semiconductor Detector Workshop (NSS/MIC/RTSD)* (pp. 1-3). IEEE, 2016. [html]
- DISSERTATIONS I. Peis. **Deep sequential models with attention for psychiatric patients clinical assessment**. *M.Sc. Thesis Dissertation (Multimedia and Communications)*, 2018.
- I. Peis. **Activity monitoring in depressed patients in the hospital setting: a pilot study testing new methods of actigraphy data analysis for predicting clinical progress and date of hospital discharge**. *M.Sc. Thesis Dissertation (Telecommunications Engineering)*, 2018.

I. Peis. **Hidden Markov Random Fields with alpha-stable distributions for brain Magnetic Resonance Images.** *B.Sc. Thesis Dissertation (Telecommunications Engineering), 2016.*

GRANTS	FPU granted to fund doctoral studies <i>Spanish Ministry of Education</i>	2019
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LANGUAGES	Spanish	Mothertongue
	English	Advanced
	French	Basic

PROGRAMMING SKILLS	Main Languages	PYTHON, MATLAB, C, JAVA
	Frameworks	PYTORCH, TENSORFLOW, SKLEARN, GPY, STAN
	Others	R, C++, SQL, HTML, JAVASCRIPT, CSS3