Daniel Barrejón

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Date Birth: 13th July 1996

Positions Universidad Carlos III de Madrid Oct. 2023 - present

Postdoctoral Researcher

Supervisor: Dr. Pablo M. Olmos

Fundación UC3M Dec. 2020 - Present

Course Instructor

Fundamentals, Advanced Machine Learning and Natural Language Processing courses

for BBVA employees.

University of Amsterdam Mar. 2022 - Jul. 2022

Visiting Researcher: Amsterdam Machine Learning Lab (AMLab)

Supervisor: Dr. Eric Nalisnick

Universidad Carlos III de Madrid Oct. 2018 - Sept. 2019

Research Intern (Graduate): Group of Multimedia Processing

Research field: Computer Vision.

Sept. 2017 - Feb. 2018 Universidad Carlos III de Madrid

Research Intern (Undergraduate): Signal Theory and Communications.

Research field: Bayesian Statistics for Signal Processing.

Education Universidad Carlos III de Madrid Sept. 2019 - Oct. 2023

PhD in Machine Learning.

Advisors: Dr. Pablo M. Olmos and Dr. Antonio Artés.

Universidad Carlos III de Madrid Sep. 2018 - Sept. 2019

M.Sc. in Multimedia and Communications.

Technische Universität München Oct. 2016 - Aug. 2017

Program: M.Sc. in Elektrotechnik und Informationstechnik.

Erasmus Scholarship.

Universidad Carlos III de Madrid Sept. 2014 - Sept. 2018

B.Sc. in Telecommunications Technologies Engineering.

Teaching Universidad Carlos III de Madrid

> T.A in Neural Networks (Bsc. in Data Science and Eng.) 2023 T.A in Machine Learning in Health (Bsc. in Data Science and Eng.) 20222021, 2022 T.A in Systems and Signals (Bsc. in Biomedical Eng.) 2021

T.A in Linear Systems (Bsc. in Telecommunications Eng.)

BBVA and Fundación Universidad Carlos III de Madrid T.A in Advanced Machine Learning T.A in Machine Learning Fundamentals 2021, 2022, 2023

2021, 2022, 2023 T.A in Natural Language Processing

Projects Deep-DARWiN Sept. 2019 - Sept. 2021

Domain Alignment and Data Wrangling with Deep Generative Models.

Real-time highway object detection Oct. 2018 - Sept. 2019 Computer vision project using Deep Learning.

Sep. 2017 - Oct. 2018 Detection of behavioural changes in psychiatric patients. Daniel Barrejón.

B.Sc. Thesis Dissertion

Update: November 30, 2023

Summer Gaussian Process Summer School (GPSS), University of Sheffield. 2020, 2021 Nordic Probabilistic AI School (ProbAi), Norwegian Open AI Lab 2021 schools Eastern European Machine Learning Summer School (EEML) 2021 Machine Learning Frontiers in Precision Medicine (MLFPM). 2019, 2020 **Publications** *Co-first authors. Order determined by coin flip. Dissertations D.Barrejón How can humans leverage machine learning? From Medical Data Wrangling to Learning to Defer to Multiple Experts PhD Thesis Dessertation, Universidad Carlos III de Madrid, 2023. Journals D.Barrejón, Pablo M. Olmos, A.Artés-Rodríguez Medical data wrangling with sequential variational autoencoders In IEEE Journal of Biomedical and Health Informatics, 2021. Peer-review R. Verma*, <u>D.Barrejón</u>*, E. Nalisnick Learning to Defer to Multiple Experts: Consistent Surrogate Losses, Con-Conferences fidence Calibration, and Conformal Ensembles Artificial Intelligent and Statistics (AISTATS), 2023. R. Verma, <u>D.Barrejón</u>, E. Nalisnick On the Calibration of Learning to Defer to Multiple Experts In ICML 2022 Workshop on Human-Machine Collaboration and Teaming, 2022. D.Barrejón, Pablo M. Olmos, A.Artés-Rodríguez, Temporal-hierarchical VAE for Heterogenous and Missing Data Handling, Bayesian Deep Learning workshop @NeurIPS 2020, Poster presentation Reviewing International Conference on Learning Representations (ICLR) 2024 Deep Generative Models for Health Workshop @NeurIPS 2023 Neural Information Processing Systems (NeurIPS) 20232023 International Conference on Machine Learning (ICML) Artificial Intelligence and Statistics (AISTATS) 2023 Advances in Approximate Bayesian Inference (AABI) @ ICML 2023 Grants & Top reviewer in Neural Information Processing Systems (NeurIPS) 2023 Top 10% reviewer in Artificial Intelligence and Statistics (AISTATS) 2023 Prizes Research Visit Grant, Universidad Carlos III de Madrid 2022 FPU Grant to fund doctoral Studies, Spanish Ministry of Education 2020 Volunteering Volunteer and attendant in Artificial Intelligence and Statistics (AISTATS) 2021, 2022 2018 Tutor for Linear Algebra in Universidad Carlos III de Madrid Let's be friends with books: Erasmus + project in Iğdır, Turkey (19 Apr.- 26 Apr.) 2017

Spanish: Mother tongue.

English: Advanced User C1. French: Upper Intermediate User B2. German: Intermediate User B1.

Computer Skills

Python, Matlab, Java, C, Latex.

DL Frameworks: Pytorch, Tensorflow, Keras.

Others: OpenCV, Git, Inkscape, Logic Pro X, Ableton Live.

References

Languages

Dr. Pablo. M. Olmos, Universidad Carlos III de Madrid.

Dr. Antonio Artés-Rodríguez, Universidad Carlos III de Madrid.

Dr. Eric Nalisnick, University of Amsterdam.

Update: November 30, 2023