

Alejandro Almodóvar Espeso

PHD STUDENT

 [aalmodovares](https://github.com/aalmodovares)
 [aalmodovares.github.io](https://github.com/aalmodovares)
 [alejandro-almodovar](https://www.linkedin.com/in/alejandro-almodovar)
 alejandro.almodovar@upm.es

EDUCATION

Universidad Politécnica de Madrid	Madrid, Spain
PhD. Communication Systems and Technologies	Currently
Thesis keywords: Causal inference, PhFederated learning, Longitudinal data, Treatment effects, Hidden confounding, Structural causal models	
Universidad Politécnica de Madrid	Madrid, Spain
M.S. Telecommunication Engineering	June 2022
Universidad Politécnica de Madrid	Madrid, Spain
B.S. Telecommunication Engineering	June 2020

SKILLS

Programming languages: Python (primary), Java, JavaScript/TypeScript, HTML/CSS, R, L^AT_EX, MATLAB
Tools: Git/GitHub, VS Code, IntelliJ PyCharm, RStudio
Specialized knowledge: Machine learning, Bayesian inference, Probabilistic methods, Causal learning, Statistics.
Languages: Spanish (native), English (fluent)

PUBLICATIONS

- Inverse Reinforcement Learning: a New Framework to Mitigate an Intelligent Backoff Attack.**
 Parras, J., Almodóvar, A., Apellániz, P.A., Zazo, S. (2022)
 IEEE Internet of Things Journal, vol 9, no. 24, pp.24790-24799.
 - Journal metrics (2021): IF: 10.238, Rank Q1 (94.15 in Telecommunications, 94.82 in Computer Science: Information Systems, 93.66 in Engineering: Electrical and Electronic)
- Federated learning for causal inference using deep generative disentangled models.**
 Almodóvar, A., Parras, J., Zazo, S. (2023)
 Deep Generative Models for Health Workshop NeurIPS 2023. (Poster)

PROFESSIONAL EXPERIENCE

Teacher assistant <i>Universidad Politécnica de Madrid</i>	Sept. 2023 – Present
<ul style="list-style-type: none"> Courses: Digital Signal Processing Probability and Random Signals Advanced Data and Signal Processing One supervised Master's Thesis in Knowledge Graphs 	
PhD student grant (Programa Propio UPM) <i>Universidad Politécnica de Madrid</i>	Feb. 2023 – Present

PROJECTS

Genomed4all European Commission	2022 – Present
Federated learning platform for medical data processing	
MadridDataSpace4Pandemics Community of Madrid	Jan. 2022 – Dec. 2023
Causal inference for treatment effect estimation in COVID-19	
Precision Drug Repurposing for Europe and the World European Commission	Sept. 2022 – Present
Knowledge graph for drug repurposing	
Synthema European Commission	Dec. 2022 – Present
Treatment effect prediction for survival analysis	