Jesús de la Fuente Cedeño

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Experience

Softvision AI March 2025 - Current
Machine Learning Quantitative Researcher Prague (Remote)

- Designing and implementing ML models for MFT strategies on cryptocurrencies derivatives.

SonyAI Sep 2024 - March 2025
Research Scientist Intern Barcelona

- Worked with **LLMs** on hypotheses generation for knowledge graphs and link prediction challenges.

DeepFi (Startup) May 2022 - Oct 2022
Research Scientist Intern Madrid (Remote)

- Designed and implemented decision-tree models for liquidity provision strategies on DeFi protocols.

Education

Center for Data Science, New York University Sep 2022 - Sep 2023
Fulbright Fellowship Ph.D. Researcher New York

Research Topics: Adaptive autoencoders for train-test distribution shift.
Advisor: Carlos Fernandez-Granda (Ph.D. Stanford '14).

Electrical Eng. Department, University of Navarra Sep 2020 - Feb 2025
Ph.D. candidate in Machine Learning applied to Computational Biology Spain

Research Topics: Graph Learning, Representation Learning, Bayesian Inference, xAI.
Advisors: Idoia Ochoa (Ph.D. Stanford '16) and Mikel Hernaez (Post-doc Stanford '16).

TECNUN School of Engineering, University of Navarra Sep 2014 - 2020
B.Eng. & M.Eng: Electrical Engineering Spain

ML Projects led

Interpretable Causal Representation Learning for Biological Data in the Pathway Space 2024
Interpretable framework with theoretical guarantees

- Poster at AIDrugX, **NeurIPS 2024**. Published at ICLR 2025.

Sweetwater: An interpretable and adaptive autoencoder for efficient tissue deconvolution 2023
Autoencoder for train-test distribution shift minimization

- Poster in MLCB 2023. Accepted at **Nucleic Acid Research**. (arXiv).

Towards a more inductive world for drug repurposing approaches 2022
Inductive and transductive node embedding analysis on bipartite graphs

- **Oral presentation** ($\frac{6}{76}$) in AI4D3, **NeurIPS 2023**. Published in Nature Machine Intelligence.

Bayesian machine learning enables transcriptional rewiring 2021
Bayesian inference model with sparsity constraints

- **Oral presentation** ($\frac{10}{43}$) in ISMB/ECCB 2021. Published in Cancer Research.

Skills

Languages
Python, R, Linux/Bash, LaTeX, Solidity.

Libraries
PyTorch, SciPy, NumPy, Seaborn, Scikit-learn.

Technologies
Docker, Poetry, Slurm, Hydra, Git, AWS.

Software
SENA-VAE, GraphGuest, Sweetwater, TraRe

Machine Learning
LLMs, **Graph Neural Networks**, Decision Trees, Autoencoders, Knowledge Graphs, Gradient-Boosting, Linear/Logistic Regression, PCA, Ensemble Learning.

Personal
Highly self-disciplined, detail and result-oriented. Creative and self-starter. Able to work on multiple projects simultaneously, with multidisciplinary teams.

Honors and Awards

1. **Kaggle Competitions Expert**. Highest Rank: 997^{th} out of +200,000 competitors.
2. **Kumo AI** Hackathon: Ranking 2^{nd} out of 20 competitors. April 2024
3. **Ph.D. Fulbright Fellowship**, 1 year at New York University. **Amount: 41,180 $** Sep 2022
4. Navarra's Government Fellowship, 2 years Ph.D. Funding. **Amount: 68,718 €** Sep 2021-2023