# Jesús de la Fuente Cedeño

## EXPERIENCE -

Softvision AI

March 2025 - Current

Machine Learning Quantitative Researcher

Prague (Remote)

• Building mid-frequency trading strategies on crypto-asset derivatives for p-hat fund.

**SonyAI** Research Scientist Intern Sep 2024 - March 2025

Barcelona

• Integrated large language models (LLMs) with graph-based machine learning models to enhance knowledge graph embeddings, improving relational reasoning across complex datasets.

DeepFi (Startup)

May 2022 - Oct 2022

Quantitative Research Intern

Madrid (Remote)

• Implemented **gradient-boosting** models for price events prediction and dynamical liquidity allocation on Uniswap v3 pools, delivering **higher risk-adjusted returns** compared to passive strategies.

#### 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

# HIGHLIGHTED PUBLICATIONS \_

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

2025

• Poster at AIDrugX, NeurIPS 2024. Published at ICLR.

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

2025

2025

• Poster in MLCB 2023. Published at Nucleic Acid Research.

# Towards a more inductive world for drug repurposing approaches

Inductive and transductive node embedding analysis on bipartite graphs

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

#### SKILLS \_

## Languages

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

#### Libraries

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

# **Technologies**

Docker, uv, 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<sup>th</sup> 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