

JESÚS DE LA FUENTE CEDENO

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EXPERIENCE

Softvision AI

Machine Learning Quantitative Researcher

March 2025 - Current

Prague (Remote)

- Building **mid-frequency** trading strategies on **crypto-asset derivatives**.

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 and improve relational reasoning across complex datasets.
- Benchmarked multiple **LLMs on node and edge embedding generation tasks** for entity and relation prediction against state-of-the-art graph embedding models, such as GraphSAGE or ComplEx.

DeepFi (Startup)

Research Scientist Intern

May 2022 - Oct 2022

Madrid (Remote)

- Developed a trade-granularity **backtesting framework** to simulate Uniswap v3 liquidity provision strategies, enabling the evaluation of **real-time events** such as impermanent loss.
- Implemented **gradient-boosting** models to predict price events and strategies to dynamically optimize liquidity ranges in Uniswap v3 pools, achieving **superior performance compared to passive strategies**.

EDUCATION

Center for Data Science, New York University

Fulbright Fellowship Ph.D. Researcher

Sep 2022 - Sep 2023

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

Ph.D. candidate in Machine Learning applied to Computational Biology

Sep 2020 - Feb 2025

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

B.Eng. & M.Eng: Electrical Engineering

Sep 2014 - 2020

Spain

HIGHLIGHTED PUBLICATIONS

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](#).

Towards a more inductive world for drug repurposing approaches

2023

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, 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: 997th out of +200,000 competitors.

2. **Kumo AI Hackathon**: Ranking 2nd 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