# IRIS DANIA JIMENEZ

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Hello! I am a master's student in Statistics and Data Science with a deep passion for Machine Learning and AI.

#### Education

## Ludwig Maximilian University of Munich

Master's degree in Statistics and Data Science | Apr 2023 – present Minor in Machine Learning

# • University of Milan-Bicocca

Bachelor's Degree in Statistics and Information Management | Oct 2019 - Mar 2023

- Python, SQL,NoSQL, R and SAS -Supervised and Unsupervised learning - Statistical

modeling - Tableau, Orange, RapidMiner - Parallel database and parallel query processing - Demography - Medical and health statistics

# **Experience**

### Nov 2024 - Present

Research Assistant | Chair of Computer Vision and Al @TUM

- Collaborated with a PhD candidate to advance research Computer Vision
- Implemented algorithms and simulation models
- Conduct comprehensive literature research in XAI and Computer Vision
- -Skills: Python, Cluster configuration, Git

### June 2023 - Feb 2025

Research Assistant | Bavarian Al Chair for Mathematical Foundations of Artificial Intelligence

- Collaborated with a PhD candidate to advance research in explainable AI(XAI)
- Implemented algorithms and simulation models
- Conduct comprehensive literature research in XAI and Computer Vision
- -Skills: Python, Cluster configuration, Git

#### Oct 2022 - Dec 2022

Machine Learning Intern | EOMAP GmbH | Germany

- Analyzed satellite images using unsupervised machine learning techniques
- Developed and implemented a classification algorithm to detect cloud shadows
- Skills: Python, QGIS, AWS, k-means

#### **Publications**

"Dialect and Gender Bias in YouTube's Spanish Captioning System."

Presented at the 11th International Conference on Computational Social Science (IC2S2), 2025.

#### Master's Thesis

"Rendering Translucency: Benchmarking and Enhancing Subsurface Scattering in 3D Gaussian Splatting" (expected Oct 2025)

Technical University of Munich, University of Munich - Department of Computer Vision, Department of Statistics

Exploring rendering performance of subsurface scattering techniques across translucent datasets using 3D Gaussian Splatting frameworks.

### **Projects**

- "VI-MIDAS: Variational inference for microbiome survey data"
   Extended VI-MIDAS for microbial abundance modeling with latent ecological factors and applied it to a new marine dataset. Developed a novel variant enabling unified latent representations of environmental drivers.
- "Model Merging: Enhancing NLP Task Performance by Integrating Fine-Tuned Small Models with BERT Base"
   Explored hybrid NLP model merging by combining TinyBERT and BERT Base to balance accuracy and efficiency. Evaluated performance on IMDb and SNLI datasets using the GLUE benchmark, comparing accuracy and FLOPs to traditional fine-tuning approaches.

#### Languages

- English Full proficiency
- Spanish Native speaker
- Italian Native speaker
- French Proficiency
- German Elementary