

KATYNA SADA DEL REAL

+34 684 340 035 @katynasada@gmail.com katynasada.github.io Spain/Mexico

SUMMARY

Creative AI Engineer with academic and applied experience building machine learning models and performing data analysis. Skilled in designing, deploying, and scaling ML workflows; adept in model explainability, AI pipelines, and prompt engineering.

TECHNICAL SKILLS

Programming: Python (PyTorch, PyTorch Lightning, TensorFlow), SQL, R, Java
AI/ML: DNNs, CNNs, Transformers/LLMs, Autoencoders, Explainability
Platform & Tools: SLURM, Linux (Ubuntu), AWS, Git, Weight & Biases

AWARDS

Methodological Contribution Award
Institute of Data Science and AI (2023)
Scholarship for MSc
Banco Santander (2020)
First Prize, B+INVAS Innovation Challenge
Developed a blockchain-based medical records system. (2018)
Full Tuition Scholarship for BSE
Becas Alumni UNAV (2016)

CERTIFICATIONS

Develop Generative AI Applications & Build RAG Applications
(2025) IBM
Deep Learning Methods for Healthcare
(2023) University of Illinois
Improving Deep Neural Networks
(2022) DeepLearning.AI
Neural Networks and Deep Learning
(2021) DeepLearning.AI
Deep Neural Networks with PyTorch
(2021) IBM

EDUCATION

TECNUN, University of Navarre San Sebastian, Spain
PhD in Applied Engineering - Artificial Intelligence 2021 - 2025
MSc in Data Analytics 2020 - 2021
BSE in Biomedical Engineering 2016 - 2020

PROFESSIONAL EXPERIENCE

Artificial Intelligence Engineer
Allclaims Pro Public Adjusting 01/25 - Present
VA, USA

- Developing LLM-based tools with prompt engineering and RAG workflows, and collaborating with teams to integrate these solutions, enhancing decision-making processes and business workflows.

Postgraduate Researcher / PhD Candidate
TECNUN, University of Navarre 2021 - 2025
San Sebastian, Spain

- Created or fine-tuned ML models for predicting cancer treatment response.
- Served as a Teaching Assistant for undergraduate courses in Data Analytics, High-Performance Computing, Bioinformatics, and Next-Generation Sequencing.

Visiting Researcher
Columbia University Irving Medical Center 09/23 - 02/24
NYC, USA

- Preprocessed and normalized biomedical datasets; implemented ML models to predict drug response for patient-derived cells.

Marketing Advisor
Samaika (Family Startup) (Seasonal: Summers) 2017 - Present
MTY, Mexico

- Directed brand development and sales strategies, to boost market presence.

PUBLICATIONS

Foundation Models and Deep Learning for Cancer Drug Response Prediction: A Framework for Data, Metrics, and Validation.
Manuscript Under Review (2025)
Sada Del Real, K., Swamy, V., Arcagni J., Wang E., Rabadan, R., & Rubio, A.

Enhancing Tree-Based Machine Learning for Personalized Drug Assignment
Manuscript Under Review (2025)
Sada Del Real, K., & Rubio, A.

Discovering the mechanism of action of drugs with a sparse explainable network.
EBioMedicine (2023)
Sada Del Real, K., & Rubio, A.

Precision oncology: a review to assess interpretability in several explainable methods.
Briefings in Bioinformatics (2023)
Gimeno, M., Sada Del Real, K., & Rubio, A.