Adrian Fernandez Cuevas

adfecu@gmail.com ❖ +34 654 88 42 51 ❖ Madrid, Spain ❖ Linkedin

EXPERIENCE

Universidad Carlos III de Madrid **September 2024 – December 2024**
Research Assistant, Department of Bioengineering *Leganes, Spain*

- Designed and implemented models to enhance segmentation accuracy in lung nodule detection using **deep learning** and **computer vision**.
- Developed **YOLO** and **Unet** models, researched novel architectures using **PyTorch** on **GPU clusters**.
- Improved segmentation accuracy over **SOTA**, contributing to advancements in **medical imaging** research.

Tecnun University of Navarra **February 2024 – June 2024**
Bachelor Thesis *San Sebastian, Spain*

- Engineered an **AI model** for classifying cervical cytology samples with limited labeled data using **weak supervision** and **multiple instance learning**.
- Researched, collected data, and developed a **ResNet CNN** with an **RNN** in **PyTorch**.
- Achieved **97% accuracy** and a **98% F1 score**, demonstrating the model's effectiveness in **digital pathology**.

Fundación Vicomtech **June 2023 – August 2023**
Intern *San Sebastian, Spain*

- Created an interactive **data visualization dashboard** using **Python** to analyze **cancer patient data**.
- Built a **Streamlit web app**, fixed **frontend bugs**, and provided support for the **Cancer Survivor Smart Card** project.
- Enhanced usability of the **web scraper**, improved **data processing** pipelines, and optimized **data analytics workflows**.

Tecnun eRacing **August 2023 – August 2024**
Formula Student, Head of Race Engineering *San Sebastian, Spain*

- Led the **race engineering** team and managed **on-track activities** to optimize **vehicle performance** using **data analysis**.
- Supervised a **3-person team**, created **Jupyter Notebook reports**, and utilized **MATLAB** for car data analysis.
- Secured **5th place (2023) and 2nd place (2024)** at the **Barcelona-Catalunya circuit**, contributing to the team's best results.

PROJECTS

CAF Machine Learning Challenge **April 2023 – May 2023**

- Developed a **machine learning model** to detect **defects in railway tracks** using **sensor data**.
- Implemented a **supervised classification model** using a **Gaussian kernel SVM** in **MATLAB**.
- Won **first place** with an **F1 score of 97%** on the test set, demonstrating expertise in **data science** and **predictive modeling**.

EDUCATION

Tecnun University of Navarra **June 2024**
Bachelor's Degree in Biomedical Engineering *San Sebastian, Spain*

- Class representative

SKILLS

Python, MATLAB, R, SQL, C++, Git, Docker, Scikit-Learn, Mathematics and Statistics. **Languages**: English (C2), Spanish