



# GUILLERMO RAMIREZ CARDENAS

Computer Engineer with own degree in Robotics and Internet Of Things.

22 years old, ambitious, eager to work and train as an engineer. I have been a semi-professional tennis player and it has instilled in me many values for my development as a person and to get 100% of myself. Currently, I am working at a leading company, Telefónica, applying my expertise in Artificial Intelligence to various projects and sharing my knowledge through conferences. Previously, I was awarded an exceptional scholarship to contribute to cutting-edge AI research at one of Spain's premier AI research centers, where I developed and refined complex models.

## SKILLS

### • Technical:

- **Frameworks:** PyTorch, TensorFlow, Keras, Scikit-Learn, Optuna.
- **Models:** Classification Models, SOM, MLP, CNN, Self-Attention, KNN, Naïve Bayes, Random Forest, SVM, Autoencoders.
- **Generative AI:** LLMs, Diffusion Models, Stable Diffusion, Transformers-based Models.
- **Data Processing:** Pandas, NumPy.
- **Visualization:** Matplotlib, Plotly, Seaborn, Power BI.
- **Key Tasks:** Data preprocessing, data visualization, classification algorithms, prediction, clustering.
- **Platforms:** AWS, OpenAI Platform, Ollama.
- **Containers & GPU:** Docker, CUDA, Linux Shell Scripting.
- **Languages:** Python, C, Java, JavaScript, SQL, PHP, Swift, HTML, CSS.
- **Tools:** Git, GitHub, Jira, Confluence, version control, testing.

### • Soft:

- Team **work**.
- Team **leadership**.
- Problem **solving**.
- Daily effort and **perseverance**.

## PERSONAL PROJECT

- **(2020-2023) Guidance System for Visually Impaired people** in close environments called VIT (Visually Impaired Techniques).
  - **Winner** of the national Santander explorer contest where I was able to enjoy the prize with a trip to porto with the winners from the rest of the world in their respective countries.
  - **Winner** of the best social project contest at the university.
  - **Top 17** in the international Fowler Innovation Challenge contest at the University of San Diego.
  - **Winner** of the young entrepreneurship contest of the Pozuelo City Council .
  - Present a national **patent**.

## SOCIAL WORK

- **(2021-2022) Volunteer** in Asociacion Al Paso working with people with disabilities.
- **(2017-2018) Volunteer** in Guadarrama hospital with elderly people.

## CONTACT

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## WORK EXPERIENCE

### Data Scientist

- **(06/08/2024-Present) Telefónica Educación Digital**
  - Enhancing e-learning platforms with Artificial Intelligence by implementing generative AI based on **LLMs** to provide advanced virtual tutors and assistants. Additionally, leveraging **machine learning models** to improve personalization, content recommendations, and user engagement across the platform. I am responsible for the research, development, and testing of these solutions.

### Artificial Intelligence Research Intern

- **(01/09/2023-31/07/2024) CEIEC Research Institute**
  - My main project involved **designing a Generative AI model using Diffusion Models** for cultural heritage image reconstruction and generation based on complex descriptions. I conducted extensive research on **DDPM** and **LDM** principles and participated in all phases, including research, architectural design, data preparation, modeling, development, and testing.
  - Additionally, I **fine-tuned Stable Diffusion 2.1** with a cultural heritage dataset for comparison purposes, developed a **Self-Organizing Map (SOM)** to cluster and classify Mudejar church floor plans for architectural analysis, and created a user-friendly web interface to access and operate models on servers.

### Junior Software Engineer

- **(01/06/2023-30/07/2023) AyD Software SL**
  - Developed and implemented **payment methods** in a **REST API**, integrating third-party solutions like ADYEN, MyPOS, SUMUP, and REDSYS, covering research, development, and testing phases.

### Software Engineer Intern

- **(01/06/2022-30/07/2022) AyD Software SL**
  - Contributed to the **development** team using Python and Django for a **REST solution**.
- **(01/06/2021-30/07/2021) AyD Software SL**
  - Participated in the **development** of AyD64 v8.0 GES (ERP) and AyD64 v8.0 TPV (Point of Sale).

## CERTIFICATES AND COURSES

- **Cambridge Certifications**
- **TOEFL, SAT (C1 English Level)**
- **LLM Engineering: Master AI, Language Models and Agents**
- **Google IT Automation with Python**
- **BI courses provided by Telefónica**