Jesús Adrián Montesinos Correa

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Technical skills .
→ `Python` (4 years) *Problem Solving.* `Google Colab`, `Jupyter Notebooks`, `Visual Studio Code`
- *Data science* `Seaborn`, `Matplotlib`, `Pandas`, `NumPy`, `SymPy`, `Scikit-Learn`,
- *Natural Language Processing* (2 year) `NLTK`, `torchText`, `Fine-Tuning`, `PyTorch`, `MongoDB` (*Learning*) `RAG` (*Learning*)

→ `Wolfram Language` (4 years) *Maths* and *Physics*, *Data science*, *Natural Language Processing* (2 years)
→ LaTeX (4 years) Macros, tables, images, *AMS* packages, multi-file documents, Overleaf, LaTeX Beamer, BIBTeX
→ *Extra* `Markdown`, `Git` y `GitHub`, `Linux systems` (*Learning*).

Languages .
- `English` B2 Level
- `Russian` Basic level (Self-Learning)

Technology Certifications .
- `Wolfram` *Math and programming*
- `Moscow Institute of Physics and Technology` Technical Writing

***Soft skills*:** .
→ Teamwork creating a safe environment so that colleagues can express their ideas without fear.
→ Being objective in receiving and giving feedback to create better products in the future
→ Critical thinking to understand the situation and give possible solution ideas to optimally solve the problem.
→ Write and express ideas clearly so that others understand the idea.

Work Experience • **Technology Associated** Citibanamex (Sep 2nd 2024 - Actual) I joined the AI and Fraud teams. I apply my knowledge of NLP and Data Science to handle various client-based needs, help with architecture, and share ideas.

Relevant experience .
• **Advisor** Masters degree thesis *Ecuación de Dirac en un espacio tiempo con simetría esférica sin tétradas* where I helped in the development of programs and mathematical calculations using the `Wolfram Language` to simplify the time of the calculations
• **Mentor** Wolfram High School Summer Research Program (Bentley University, Boston, MA June 25–July 13, 2024) I helped students with coding in the Wolfram Language. My projects were: a) Analyzing 3D shapes for virtual reality creation, b) Plot range for dynamic visualizations, and c) N-Grams in language families.
• *Community* **Wolfram Student Ambassador** (May 2022 - Actual) Use `Wolfram Language`, share ideas, improve my coding skills
• **Expositor** Wolfram Tech Conference (October 16-18 2024) Topic *An Analysis of Colloquialisms: Spanish from Mexico and Spain* as part of the Projects from Wolfram Student Leadership Programs where we compared the structure and relations of these words
• **Featured Contributor** in the Wolfram Community where I have been publishing post about randomness using mathematical functions, analyzing distributions of numbers and different areas related to Neural Networks and Math
• **Expert Contributor Article** in Built In witht the post How to Include Side-by-Side Images in LaTeX where I talk about how to add images in LaTeXusing the package `graphicx` and the environment `figure`, as well as the `minipage` environment.
• **Conference** (*Spanish*) *Uso del modelo distilBERT para el reconocimiento de reseñas positivas y negivas en restaurantes* A conference in Instituto Mexicano del Petróleo We used `re`, `PyTorch`, implemented `distilBERT` and classified the text with an accuracy of 97%
• **Expositor** Wolfram Tech Conference (November 1-3 2023) Topic *Comparison of Papers of English and non-English speakers in Physics* we classified physics articles, created visualizations and made a classification algorithm with 85% accuracy.

Hacks .
• DS/AI - **Hackathon** winner HackMorelos13 (May 16–18 2024) project ExpoEtico an assistan to help you with your presentations correcting speech and posture errors using *CV* and *NLP*. For the text part I used `Python`. `pydub` and `speech_recognition` to convert from audio to speech. `Collections` to count the frequency of words. `Google Gemini Pro` our LLM model to get the synonyms suggestions, and to compare our speech with a prompt that we need to cover. `distilBERT` to classify the sentimets of our feedback
• DS/AI - **Hackathon** winner HackMexico (April 13-14 2024) project Juchi where we develop a financial fraud detection (FFD), credit analysis with `Messenger chatbot`, and a house searching service based on the `Zillow's API` . Using the `Tokenizer` from *HuggingFace* we fine-tuned the LLM `BERT` using `PyTorch` and `DataLoader` we got an accuracy of 97%
• DS/AI - **Hackathon** winner Solo Hacks 1.0 (Nov 18-19 2023) Using `Python` extracted the text from a PDF file, used a transformer to translate it from Spanish into English, and generated an MP3, and a PDF file with the text in Spanish and English.
• **Ideathon** Energy transition by MIT (29-30 May 2023) I learned to think design-based, to have clarity on what needs to be solved and that no idea is a bad idea. I improved my ability to work with multidisciplinary teams, systematically identify challenges and opportunities, and then start to generate a solution for the unknown.
• DS/AI - **Hackathon** winner AI Hackfest Hackathon (May 12-14 2023) Using `Python` we developed a web application that allows users to upload a PDF and ask queries to which answers will be provided along with the reference text using LLMs.
• Blog - **Project** LaTeXteada (January 2021 - 2022) I wrote about useful commands to create intermediate-level notes, shared some tips to better understand how to use LaTeX and recommendations on how to use unusual commands, based on my experience.
• Math - **Expositor** diCu [Quantum Information Division] (September 4-6 2019) Topic *von Neumann entropy for an initial mixture of atomic field states in the Jaynes-Cummings model* visualized the behavior by plotting information from the mixture in `Mathematica`