Jesús Adrián Montesinos Correa

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Technical skills

- \rightarrow Python (3 years) I solve problems in Project Euler y HackerRank. Google Colab, Jupyter Notebooks.
 - Data science Seaborn, Matplotlib, Pandas, NumPy, SymPy, Scikit-Learn, PyTorch
 - Natural Language Processing (5 months) NLTK, spaCy, torchtext, contractions, RNNs
- \rightarrow Wolfram Language (3 years)
 - Math Mathematical problem solving, interactive behavior and graphing, I create computational reports.
 - Data science Classification with Classify, prediction with Predict, clustering FindClusters
 - Natural Language Processing Text cleaning, entity extraction, creation of text processing pipelines
- \rightarrow LATEX (3 years) Macros, tables, images, AMS packages, multi-file documents, Overleaf, LATEX Beamer, BIBTEX
- → Markdown, Git y GitHub, basic mastering of the Linux terminal, SQL (6 months), Web scrapping.

Technology Certifications: Wolfram University Maths and Programming, HackerRank Python and Problem Solving, Moscow Institute of Physics and Technology Technical Writing

Languages: English B2 Level, Russian Basic Level (Learning)

Soft skills:

- \rightarrow 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.
- \rightarrow Write and express ideas clearly so that others understand the idea.

Experience and Leadership

- o Expositor in diCu [Quantum Information Division] (September 4-6 2019) I presented the topic von Neumann entropy for an initial mixture of atomic field states in the Jaynes-Cummings model where the behavior was visualized by plotting and calculating in Wolfram Mathematica using information from the mixture
- Winner of the Digital Age's Hackathon (December 10-11 2019) Project Questify, a system for creating tests and their solutions from a given text using artificial intelligence in Python
- o **Project** LATEXteada (January 2021 January 2022) https://dev.to/latexteada Blog where I wrote about useful commands to create a scientific paper, or school notes, at intermediate level. I shared some tips to better understand how to use LATEX and some recommendations on how to use not so common commands, based on my experience.
 - \rightarrow I have the publication in 2nd place worldwide in a Google search (March 2023).
- Webinar Visualización Datos y Geocomputación con el Wolfram Language (July 2022) where using Wolfram I solved and graphed physics and math equations, with natural language input I obtained data from experiments and fit the results to known constants, used geocomputing to analyze distributions on maps and graphed the temperatures of Mexican beaches.
- 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.
- o Ideathon Energy transition (29-30 May 2023) Massachusetts Institute of Technology (MIT) 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, identify challenges and opportunities in a systematic way and then start to generate a solution for the unknown.
- Wolfram Tech Conference (2023) Link Topic: Comparison of Papers of English and non-English speakers in Physics where we obtained information and classified physics articles, cleaned and processed the text to obtain different components, created visualizations and made a classification algorithm with 85% accuracy.
- Hackathon Winner Solo Hacks 1.0 (Nov 18-19 2023) Using Python extracted the text from a PDF file, used a transformer from the University of Helsinki to translate it from Spanish into English, and generated an MP3, and a PDF file with the text in Spanish and English.

Communities

ESCOM-IPN Innovation Community (April - August 2020)

- → Topic Git y GitHub (20 people) explained basic commands for creating repositories, branches, and troubleshooting errors
- → Topic FAST FOURIER TRANSFORM its mathematical meaning and implemented a part of the algorithm.
- → Wrote on Medium about Probability such as counting methods, the idea of a set and computational approximations.

Wolfram Student Ambassador (May 2022 - Actual) Program where we have to use Wolfram technologies.

- \rightarrow I make videos on YouTube YouTube about Wolfram commands in aspects of Mathematics, Data Analysis and NLP
- \rightarrow I share ideas with the other ambassadors for math projects.
- \rightarrow I talk to Wolfram experts to improve my coding skills and learn more about the language.