Alejandro Vargas

Web: sagravela.github.io · +54 9 264 585-3864 · alejandrovargasauger@gmail.com · San Juan, Argentina
Linkedin: linkedin.com/in/sagravela · GitHub: github.com/sagravela · Kaggle: kaggle.com/sagravela

DATA SCIENCE

My background as a Geophysicist has given me a deep appreciation for working with complex, vast datasets —from raw data collection to advanced modeling. Now, I'm channeling that expertise into the dynamic world of Data Science and AI. I'm passionate about uncovering hidden patterns and transforming data into actionable insights. Whether it's building efficient data pipelines or training AI models, I love taking on challenges that turn complexity into clarity. Solving real-world problems using cutting-edge technology is what drives me every day.

PORTFOLIO

E-commerce Recommendation Engine

Python · TensorFlow · pandas · numpy · matplotlib · seaborn · plotly · TensorBoard · Optuna

This project demonstrates the end-to-end implementation of a deep learning-based recommendation system using TensorFlow Recommenders (TFRS). It leverages a dataset of user interaction data sourced from an e-commerce platform and applies advanced deep learning techniques to model user preferences. This approach enhances the shopping experience by providing highly relevant product suggestions tailored to individual users, making the recommendation system both accurate and scalable.

Demo: huggingface.co/spaces/sagravela/demo_recommendation_engine
Run in Kaggle: kaggle.com/code/sagravela/recommendation-engine-tfrs
Repository: github.com/sagravela/recommendation_engine

Sales Time Series Forecasting

R · tidyverse · fable · tsibble · purrr · shiny

This repository offers a comprehensive, user-friendly toolkit for sales forecasting using R. From raw data to an interactive dashboard, this project streamlines the entire process of forecasting sales, helping businesses make data-driven decisions about inventory, staffing, and marketing.

Demo: sagravela.shinyapps.io/shiny_app
Repository: github.com/sagravela/sales_time_series_forecast

POSApp Desktop Windows App

Python · SQLalchemy · PyQt6 · PyInstaller

POSApp is a comprehensive Point of Sale (POS) system designed to streamline inventory management, transaction processing, and sales reporting. Developed as a Windows desktop application, it offers an easy installation process and an intuitive user interface.

Video Demo: youtube.com
Repository: github.com/sagravela/POSApp

EDUCATION & INTERNSHIPS

Bachelor's degree of Geophysics
UNSJ - Argentina · 5 years

IAESTE Practical Training
IAESTE Scholar · UNICAMP - Brazil · 2022 (2 months)

Noise Properties in the GPS/GNSS Time Series of San Juan Permanent Stations
CICITCA Scholar · UNSJ - Argentina · 2021-2022 (1 year)

Geophysical Characterization of the Crust in the Region of Major Unconventional Hydrocarbon Exploration in Argentina
CIN Scholar · UNSJ - Argentina · 2020-2021 (1 year)

ADDITIONAL TECH STACK

- PyTorch
- scikit-learn
- Azure
- SQL
- JavaScript
- HTML/CSS
- LangChain
- Docker
- Selenium
- Scrapy
- Streamlit
- Linux/Bash

SKILLS

- Adaptability
- Teamwork
- Problem-solving
- Attention to detail