Alexis Alejandro Martínez Suárez

alexis.martinez.6584@gmail.com | +56 9 6847 9046| linkedIn/alexismartinezs | github/alex-msu

PROFILE

Computer Engineering student with a strong focus on **Data Science**, **Machine Learning**, and the development of **Python-based solutions**. Passionate about building efficient models and solving **real-world problems** through **technology**.

EDUCATION

Bachelor's Degree in Computer Engineering, major in Data Science — Cerrillos, RM | Mar 2022 – Present
DUOC UC – Plaza Oeste

Técnico en Administración de Empresas (mención RRHH) — Peñaflor, RM | Graduated 2020
Colegio Comercial de Peñaflor

CERTIFICATIONS

TOEIC | 980/990 – English Level: C1 (MCER) — ETS | Dec 2024

PROJECTS

RAINFALL PREDICTION USING ML + WEB APP

Python, Pandas, scikit-learn, Flask, HTML, pickle

DDeveloped a classification model to predict rainfall using meteorological data from Australia. Built a Flask-based web application to serve the model.
Result: Achieved 88% accuracy on test data.

SENTIMENT ANALYSIS WITH RNN, LSTM & TRANSFORMER

Python, Keras, TensorFlow, scikit-learn, PyTorch, NLP

Classified tweet sentiments using the Sentiment140 dataset. Compared RNN and LSTM architectures based on precision, F1-score, and loss, ultimately selecting LSTM as the best performer. Also implemented a basic Transformer model in PyTorch as a conceptual experiment.
Result: LSTM outperformed RNN (77% vs 72% accuracy) — the Transformer was included as an exploratory prototype.

IMAGE CLASSIFICATION USING TRANSFER LEARNING (CIFAR-10)

Python, TensorFlow, Keras, Matplotlib

Designed and trained a CNN using transfer learning to classify CIFAR-10 images into 10 categories. Applied regularization techniques (Dropout, L2, Data Augmentation) to improve generalization and reduce overfitting.
Result: 89.04% validation accuracy.

CUSTOMER RETENTION PREDICTION (CHURN)

Python, Pandas, scikit-learn, Matplotlib, Seaborn

Built a full data science pipeline to analyze customer behavior from a fictional bank and predict churn using supervised models (Random Forest). Performed data cleaning, feature engineering, and categorical encoding. Evaluated performance with a strong focus on F1-score and recall to ensure a balanced model.
Result: F1-score and recall ≥ 0.96 for both classes.

TECHNICAL SKILLS

Languages: Python, SQL, Java, JavaScript, HTML, CSS
Data Science & ML: Pandas, NumPy, scikit-learn, Matplotlib, Seaborn
Deep Learning: TensorFlow, Keras, PyTorch
Tools & Environments: Git, GitHub, Jupyter Notebook, Google Colab, Power BI, Notion
Databases: MySQL, SQLite
Others: Microsoft Excel, Word, PowerPoint