CARLOS GARCÍA
Data Scientist | Advanced Analytics | Data Engineer

CONTACT

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- carlos.garcia.economist@gmail.com
- Open to relocation
- Carlos García
- Github Proyects

EDUCATION

Diploma in Data Science
UNAM, Universidad Nacional Autónoma de México (2021)

Master's degree in Computational GeoIntelligence
Centro de Investigación en Ciencias de Información Geoespacial (2020)

Specialty in Geomatics
Centro de Investigación en Ciencias de Información Geoespacial (2018)

Bachelor´s degree in Economics
UNAM, Universidad Nacional Autónoma de México (2017)

LANGUAGES

English – Advanced (C1)
German – Basic (A1)
Spanish – Native

TECH SKILLS

- **Python**
- **SQL**
- **Tableau/PowerBI**
- **ML Libraries/ MLFow**
- **GitHub**
- **ArcGIS / QGIS**
- **PySpark**
- **Azure**
- **Docker**
- **Databricks**
- **CI/CD**

COURSES & CERTIFICATES

Microsoft Azure Data Scientist Associate
Microsoft, 2024

Microsoft Azure Fundamentals
Microsoft, 2024

Microsoft PowerBI
Microsoft, 2023

TigerGraph Associate Certificate
TigerGraph, 2023

Graph Algorithms for Machine Learning TigerGraph
TigerGraph, 2023

Jira Fundamentals Certificate
Jira, 2022

IBM Data Science Methodology
IBM, 2022

Tecnológico de Monterrey – Data Scientist   **(Aug 2022 – *Current*)**
Higher Education | Monterrey, Mexico

- Analyze and optimize large databases (**10 million entries**), using predictive modeling techniques to solve complete business problems and leverage organization capabilities across **+20 university campus**.
- Design statistical methods to collect, organize, interpret, and classify new information.
- Generation of admission-enrollment prediction modelos for more than 15,000 students admitted each school year, correctly identifying at least 80% of those early enrollments.
- Draft and implement NLP model update to optimize code and data systems by adapting Bayesian Search methods.
- Design Tableau / Power BI dashboards to reveal operational efficiency with key metrics (# of users, active rate, churn rate**)** to measure success and improve the business.
- Analyze **150,000 student graduates** by using Spatio-Temporal Weighted Regression system, to develop forecasts and competition analysis.

Achievements:
- *Achieved a student success prediction system by using Voting Classifier which led to a 66% F1 Score in University level and a 77% in High School level.*
- *Managed tuition withholding model update into a semi-automatic model, achieving 50% decrease in human errors.*

Universidad Nacional Autónoma de México – Undergraduate Teacher   **(Jan 2025 – Current)**
Higher Education | Mexico City, Mexico

- Teach classes to groups of 40+ students about regional economic analysis where we see applied methods such as geographically weighted regression, spatial clustering, network centrality, etc.
- We learn to search for geographic data from the Mexican and international context, enrich it, process it and make it useful for quantitative analysis and decision making at the individual, company and government levels making use of tools like QGIS, Excel, GeoDa and Python.

Banco BASE – Data Scientist   **(May 2022 – Aug 2022)**
Financial Services | Monterrey, Mexico

- Identify and test hypotheses, ensuring statistical significance, as part of building predictive models for credit risk department
- Evaluate data quality metrics and data quality audits to benchmark the state of data quality. Write clear and clean production-ready code for algorithms/models/pipelines for business functionality and data product.
- Develop Machine Learning models to detect high risk, current clients in derivatives operations.

MITEC – Data Scientist   **(Jan 2021 – May 2022)**
Financial Services | Monterrey, Mexico

- Create and implement data architecture strategies and solution recommendations to identify fraudulent transactions by using Hot-Cold analysis across Mexico and forecast which entities report higher probability of fraud.
- Develop algorithms and design experiments to merge, manage, interrogate, and extract data to provide customized reports, analyzing large sets of cross-databases of **10 million entries**
- Oversee data coding, statistics, and business analysis skills to manipulate bulk data from various sources.
- Provide business metrics for projects to show improvements, and monitors improvements both initially and over multiple iterations.

Achievements:
- *Achieved a reduction of 50% time in delay the results of the transactions risk analysis by using Databricks and Python.*
- *Developed fraud detection model including geographical features to detect anomaly and high-risk entities that increased the model performance by 15%.*