



EDUARDO PADRON

Data/Cloud Engineer

ACHIEVEMENTS

- Winner of the TensorFlow Microcontroller Challenge, with ML movement model for Mapping with dance Movements. Google (2021).
- Data Camp Portofolio Challenge (2023).
- 1st place UBSA Human Excellence and Social Responsibility award. Guanajuato, Mexico (2018).
- Municipal youth award of the government of the city of Guanajuato. Guanajuato, Mexico (2018).

CERTIFICATIONS/TRAINING

- English C1 TOEFL ITP
- ML Ops Course
- Data Analysis Bootcamp
- Python Advanced Bootcamp
- Data Science Bootcamp
- Advanced Data Science Bootcamp
- Data Engineering Bootcamp
- Edx Analyzing Data with Excel
- Open Data and Civic Hacking Course
- Azure AI-900

DATA STACK

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|--------------|------------|-----------|
| - AWS | - SQL | - PySpark |
| - ML Flow | - Power BI | - Excel |
| - Azure (AI) | - Git | - DAX |

GET IN TOUCH WITH ME

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Portfolio: portfolio/iotalchemist

WORK EXPERIENCE

Data Engineer

Grupo Catalyst -Traxion | September 2023 - Present

- Designed, developed, and maintained end-to-end ETL pipelines using AWS services to extract data from diverse sources such as Salesforce, SAP, and various APIs, transforming it for analysis, dashboarding and reporting purposes.
- Supported machine learning development by assisting in the deployment of ML models with AWS SageMaker and contributed to the creation of a chatbot proof of concept (POC) to deliver internal data insights, driving innovation in data accessibility and usage.
- Collaborated on a document processing project using AWS Textract to extract and structure data from physical documents, supporting the creation of a searchable internal database for operational efficiency.
- Conducted training sessions for junior team members on AWS services, data pipelines, and job monitoring techniques, ensuring team proficiency in executing data-related tasks effectively.
- Performed data analysis on processed datasets to support business decision-making and validate data pipeline outputs, ensuring alignment with enterprise projects and objectives.

Data Manager (Data Engineer)

City Cancer Challenge (Switzerland) | August 2021 - June 2023

- Implemented ML model testing and tracking using MLflow, optimizing a multi-input patient data pipeline for predictive and classification models, ensuring reliability and scalability.
- Developed and deployed an MLOps pipeline using MLflow, streamlining model testing, tracking, and deployment for predictive and classification models on multi-input patient data.
- Monitor quality of needs assessment data inputted using pre-defined indicators.
- Support development of needs assessment summary reports and analytics using C/Can data platform.
- Facilitate discussions around data management and analysis with local stakeholders.
- Support throughout the needs assessment data project in 3 cities from different countries to ensure data completeness, accuracy, quality, standardizing reporting, data insights and data visualisation as outlined in the C/Can Responsible Data Framework.
- Played a key role in data collection, analysis, and visualization by integrating data from distinct databases using SQL.
- Gathered information from diverse sources, to create visually compelling and interactive dashboards, providing stakeholders with intuitive insights into critical areas of cancer care.
- Utilized data visualization tools and techniques to present complex information in a user-friendly manner, enabling informed decision-making and fostering a deeper understanding of the data.

For more information and additional documents, visit my [portfolio](https://portfolio/iotalchemist)

PATENTS

- Motorized 3/4 pressure regulating valve (Pending)

EXTRA ACTIVITIES

Future Lab

- Community member | 2017 - present (Guanajuato, Mexico) Technological community focused on scientific and technological innovation, project development, organization of events and educational initiatives.

Bricolabs

- Community member 2019 - present (A Coruña, Spain) Community focused on designing and collaborating with the Open Source movement, the ethics of DIY and the culture of development in free technologies.

WORKSHOP INSTRUCTOR

- Developed and implemented workshop for Science Clubs International to teach AI as a tool for sustainable development with Python. (Highschool students)
- Electronics with art workshop for kids at OSHWDem by Bricolabs (Spain)

VOLUNTEER EXPERIENCE

Omdena - Dryad

- September 2021 - November 2021 (U.S.) Implemented a complete pipeline for detecting forest fires applying supervised machine learning techniques. The Python pipeline included Data Analysis for Anomaly Detection, Data Quality check and Preprocessing modules, training and inference of multiple Classification models and further deployment in Docker containers.

Ploomber

- September 2023 - November 2023 (U.S.) Ploomber team guidance to develop a production-ready project using Data Engineering (ETL pipelines with SQL and Python) for Data Analysis, Storytelling, and Visualization.

IoT Engineering/ Data Scientist (Investigation Role)

Universidad de Guanajuato | January 2018 - December 2021

- Implemented an automated irrigation project with open source platforms.
- Utilized SQL, Python, and MQTT to automate and enhance data processing, visualization, and real-time analysis for an automatic irrigation system.
- Architected and implemented a platform for Data Collection to satisfy reporting, data science, and analytics needs.
- Supervised the design and development of new data warehouses.
- Created 3D printing tools and fixtures to reduce costs and enable scalability.

PREVIOUS EDUCATION

Universidad de Guanajuato

Master in Water Sciences graduated in 2021

Bachelor in Hydraulic Engineering graduated in 2018

- Technological community coordinator (2019-2020)
- Patent development (2018-2020)

Universidade da Coruña

Master research data and IT intership in 2019

CITEEC (Technological innovation center in construction and civil engineering) and CITIC (Information and communication technology research center).

- Reduced cost and time of installation through the wireless communication and design improvements of an automated gate valve.
- Utilized data collection processes, open-source technologies, and communication protocols to enhance the efficiency and effectiveness of the irrigation system.

BINATIONAL ACADEMIC PROJECTS

- Contemporary issues in water resources U.S - Mexico water, food energy nexus. Texas A&M University/University of Guanajuato. (2017).

-U.S.-Mexico bidirectional study abroad program in water supported by 100,000 strong in America's. Gateway Community College/University of Guanajuato.(2017).

-2nd International workshop on hydrologic and hydrogeochemical processes in inter-montane Basins. Texas A&M University, College Station, Texas, EE. UU. (2019).