MARIO BURBANO

Cloud Data Engineer and Analyst

Date of birth 14 November 1984 Nationality Irish/Colombian

♥ 91 rue du Colonel Fabien, 92160 Antony, FRANCE Marital status In cohabitation

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PhD in Computational Chemistry with extensive experience in cloud computing, task automation and data analysis. I am passionate about the implementation of data pipelines and how they can facilitate the process of data-driven decision-making.

PROFESSIONAL EXPERIENCE

Data Engineer

Ysance/Devoteam

2021 - Ongoing

♀ Île de France, France

• L'Oréal As part of one of the IT/BI teams within the R&D department, I participated in a project whose aim was to migrate the existing data pipelines from a Talend/Hadoop environement towards an Airflow/GCP solution.

Data Engineer/Scientist and instructor

♀ Île de France, France

- Malakoff Humanis As part of the team in charge of the data infrastructure,
 I developed a series of scripts aimed at analyzing the data required for the
 successful migration of the company's machine learning projects developed on
 Dataiku DSS. These models relied on data hosted on-premise which was to be
 moved to the AWS cloud.
- Orange I integrated the General Public Marketing team in order to migrate the existing SAS datamarts to Dataiku DSS. I also provided several teams with training for this new tool.

Data Engineer/Analyst

Altran

2018 - 2019

♀ Île de France, France

• Essilor As a member of the team tasked with implementing and maintaining the software used internally for optical calculations, I participated in the push towards the creation of a data infrastructure on the cloud AWS. The aim was to be able to exploit the data by making it available to the data science and R&D teams. I also contributed to the team by automating the analysis of regression tests by developing a series of Python scripts which accelerated the team's ability to respond to software bugs.

Research Engineer

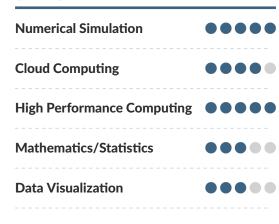
CEA

2016 - 2018

Saclay, France

- I carried out refactoring and modularisation of an electrochemistry modelling program used to perform Molecular Dynamics simulations of supercapacitors at constant potential.
- I implemented a new method for solving electrostatic equations, which was then made available as a stand-alone Fortran library.

SKILLS



Computer science

Python
SQL
Linux/Unix/Bash
Machine Learning
git
Docker



Cloud Services

BigQuery Airflow PubSub

AWS EC2 AWS Lambda Athena

LANGUAGES

- Spanish Native language
- English C2
- French C2
- German A1

EDUCATION

Ph.D. in Computational Chemistry

1 2009 - 2014

▼ Trinity College Dublin

B.A. in Computational Chemistry



▼ Trinity College Dublin

PROFESSIONAL EXPERIENCE - CONT.

Postdoctoral researcher **UPMC**

2014 - 2016

Paris, France

- Using Python, I fitted models to study correlated motion in battery components
- I established procedures to generate/analyse large quantities of data used to explain materials' properties using Fortran/Python.

Ph.D. in Computational Chemistry **Trinity College Dublin**

2009 - 2013

Oublin, Ireland

Computer modelling of metal oxides

- I performed molecular simulations of materials for energy production and storage
- Using theoretical predictions, I helped dispell misconceptions regarding the roles of impurities and morphology as possible enhancers of desired qualities in materials used to generate energy.
- I used Fortran/MPI to write simulation and data analysis programs

12 peer-reviewed articles, h-index 11, 577 citations

HOBBIES

Hiking Cycling Can
Gardening

Canine activities