MARIO BURBANO

Cloud Data Engineer and Scientist

14 November 1984 – In cohabitation

@ burbanom@tcd.ie   📞 + 33 6 43 27 79 22   📍 Antony, FRANCE   🔗 github.com/burbanom

in linkedin.com/in/burbanom/   Nationality **Irish/Colombian**

PhD in Computational Chemistry with extensive experience in cloud computing, task automation and data analysis.

EXPERIENCE

Associate Professor

University of Pau & Pays Adour

📅 2010 – Ongoing   📍 Pau, France

- Develop multi-scale computational strategies adapted to complex systems
- Develop and distribute data analyses libraries with Python
- Supervise research projects with Ph.D. and Master students
- Train UPPA users to HPC and programming languages using active learning

Research Engineer

CEA DAM

📅 2009 – 2010   📍 Bruyères le châtel, France

- Used C and MPI to include Dissipative Particle Dynamics algorithms in a massively parallel program
- Parametrization of coarse grain models for molecular simulations

Ph.D. in Computational Chemistry

Trinity College Dublin

📅 2009 – 2014   📍 Dublin, Ireland

Computer modelling of metal oxides

- Carried out molecular simulations of materials energy production and storage
- Used Fortran/MPI to write simulations and data analysis programs

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

SKILLS

High Performance Computing ● ● ● ● ●

Cloud Computing ● ● ● ● ○

Molecular Modelling ● ● ● ● ●

Mathematics / Statistics ● ● ● ○ ○

Data Visualization ● ● ● ○ ○

Computer science

Python ● ● ● ● ●
SQL ● ● ● ● ○
Linux/Unix/Bash ● ● ● ● ○
Machine Learning ● ● ● ○ ○
git ● ● ● ○ ○
Docker ● ● ○ ○ ○
Fortran ● ● ● ● ○

AWS   GCP   Dataiku DSS   SAS

Talend   pandas   Plotly/Dash

scikit-learn   Flask   Visual Studio Code

Embedded Systems   Statistical Analysis

Cloud Services

BigQuery   Airflow   PubSub

AWS EC2   AWS Lambda

LANGUAGES

English ● ● ● ● ●

Spanish ● ● ● ● ●

French ● ● ● ● ●

EDUCATION

Ph.D. in Computational Chemistry

📅 2009 – 2014   📍 Trinity College Dublin

B.A. in Computational Chemistry

📅 2004 – 2009   📍 Trinity College Dublin