

#### MORE THAN 20 YEARS PLAYING WITH DATA

St Albans - AL3 - U.K.

🛮 0775 497 22 35 | 🗷 david.montaner@gmail.com | 🏕 www.dmontaner.com | 🖸 dmontaner | 📓 dmontaner | 🛅 dmontaner

## Recent Experience\_

#### **Consultant / Data Scientist**

**Chief Data Scientist** 

London - U.K.

PS AI Labs / consulting for Deutsche Bank

2023 - Present

London - U.K.

- · Using Large Language Models, vector embeddings and Agents to extract and interpret financial entities from text and news.
- Prompt Engineering for ChatGPT and Google PaLM 2. Using vector databases and BIGQUERY for Retrieval Augmented Generation

INSIG ALPI C 2018 - 2023

2010 - 202

- Organize the Data Analytics / Data Science team and coordinate with the Operations and Data Acquisition departments.
- Machine Learning applied to Investment Portfolio Management. Natural Language Processing of financial news and ESG scores.

Senior Data Scientist London - U.K.

BARCLAYS - ADVANCED DATA SOLUTIONS TEAM

2017 - 2018

- Supervising a team of 3. I implement machine learning pipelines for risk evaluation on millions of clients.
- · Building up recommend systems and customer segmentation analysis, enhancing data business value for marketing.

Data Scientist London - U.K.

GENOMICS ENGLAND LTD. - BIOINFORMATICS DEPARTMENT

2015 - 2017

- Modeling clinical and genomic data: 100K individuals, millions of variables (genetic variants).
- · Data visualization, automatic report writing, data scraping from SQL, MongoDB, Spark, web services and web pages.

#### **Founder and Head of Data Science**

Valencia - Spair

GENOMETRA S.L. 2010 - 2015

- I co-founded the company and supervised a team of 4. We developed machine learning software for diagnosis and research.
- Developed several R & Python packages, web tools and distributed pipelines. Statistical consultancy.

Part Time Lecturer Valencia - Spair

University of Valencia - Mathematics and Computer Science Departments

2009 - 2015

• Teaching databases, R, Python and Bash programming, statistics and probability to undergrad and MSc students.

# Head of the Biostatistics Unit

atericia - Spari

PRINCIPE FELIPE RESEARCH CENTER (CIPF) - COMPUTATIONAL GENOMICS DEPARTMENT

2005 - 2010

• Written **+50 scientific publications**. Presented and organized +30 congresses and workshops. Supervised staff and students.

#### **Education**

### **PhD in Bioinformatics and Functional Genomics**

Valencia - Spair

Universitat de Valencia - Biotechnology

• Multidimensional Logistic Regression and other Machine Learning methods for the analysis complex biological data.

#### MSc in Statistics with Applications in Medicine (Erasmus student)

Southampton - U.K.

 ${\tt University\,of\,Southampton-Statistics\,Department\,/\,Universidad\,Complutense\,de\,Madrid}$ 

2001 - 2002

2009 - 2013

• Experimental design, stratification, sample size calculation, demographic analysis, clinical trials, spatial analysis.

# Degree in Mathematics

Madrid - Spain

Universidad Complutense de Madrid

1995 - 2001

· Statistics and Operations Research specialty.

# **Skills**

**Software** Python, R, Bash, Linux, Git, GitHub, Docker, Pytest, Tox, Jenkins, Jupyter Notebooks, Emacs-Lisp, Haskell, regexp,

Vector Databases (Pinecone, ChromaDB, Google's Vector Search) SQL (BIGQUERY, PostgreSQL), NoSQL(MongoDB,

DynamoDB, Elasticsearch),

Stats & ML Numpy, Pandas, SciPy, SciKit Learn, PyTorch, Pyspark, Dask,

**Visuals** Matplotlib, Seaborn, Plotly, Pyvis, Cytoscape, R ggplot2, Looker,

**NLP and LLMs** LangChain, OpenAl API, Google PaLM 2, Transformers-HuggingFace, SentenceTransformers, Spacy, NLTL,

**Cloud** GCP (BigQuery, Vertex Ai, cloud functions), AWS (S3, Lambda, SageMaker, CloudFormation), boto3, Mongo Atlas,

Web Plotly Dash, Flask, Flask-RESTX, FastAPI, Swagger, R Shiny, Gunicorn, NGINX, Beautiful Soup, Requests