Juan José **Cervilla**

DATA ANALYST & SOFTWARE ENGINEER | SPANISH AND FRENCH DUAL CITIZENSHIP

44 Allée des Demoiselles, 31400, Toulouse, France

☐ (+33) 6 12 63 82 94 | ✉ juanjocervilla18@gmail.com | 🏠 cervillawebsite.netlify.app | ⬡ JuanjoCervilla | 🔗 juan-cervilla

Aerospace engineer reborn as a software engineer, passionate for new technologies, data analysis and automation. With a strong foundation in engineering principles, I have quickly adapted to the complexities of working with vast datasets, mastering the latest tools, and adapting my skills to the constantly evolving **software** field. Committed to continuous learning and staying up-to-date with industry trends.

Work Experience

CGI
Toulouse, France

DATA CONSULTANT - PERMANENT CONTRACT
Aug. 2023 - Today

- Led the development of a **Business Intelligence application**, managing a team of 3 and coordinating closely with the data engineering team
- Automated **ETL pipelines** processing billions of rows using Python, dbt, PySpark, Apache Airflow, and Amazon S3
- Designed and optimized complex **SQL queries**, significantly improving dashboard performance and load time
- Enhanced data visualization capabilities by integrating advanced charting libraries **(Echarts/Chart.js)** and custom Python scripts
- Managed and maintained **BI application infrastructure**, including server/node management, user governance, and cache loading schedules
- Performed in-depth data analysis using Python and led the migration to **open-source BI tools** such as Apache Superset and Dash by Plotly
- **Tools** → **Spotfire** | **Python** | **JavaScript** | **HTML** | **CSS** | **SQL** | **Power BI** | **Node.js** | **Dash-Plotly** | **Superset** | **PySpark** | **Dbeaver** | **PostgreSQL** | **Hive Apache** | **AirFlow**

AIRBUS on behalf of EXPLEO GROUP
Toulouse, France

DATA ANALYST & SOFTWARE DEVELOPER - PERMANENT CONTRACT
Aug. 2021 - Jul. 2023

- Preparation, follow-up and analysis of **flight test campaigns** in 1VVGL team at Airbus
- Designed and developed interactive dashboards using **Dash** and **Qlik** to analyze and visualize critical flight test data sourced from the datalake
- Built and maintained multiple APIs to enable seamless data integration between dashboards and the datalake infrastructure
- Applied **unsupervised ML algorithms** (e.g., K-Means, HDBSCAN) for real-time anomaly detection in sensor data
- Automated routine workflows within the **Google Workspace ecosystem** using Python and Google APIs, improving task efficiency
- **Tools** → **Python:** Jupyter Notebook · Sklearn · OOP | **Dash-Plotly** | **Flask** | **Sqlite** | **GitHub** | **Qlik** | **GSuite**

ALTEN
Toulouse, France

DATA SCIENTIST
July 2020 - Feb 2021

- Optimization of airline schedules : **linear optimization model** using **GLPSOL optimizer** and **heuristic model** evaluated by a cost function
- **Tools** → **Python** : GLPK command-line solver · OOP (Object Oriented Programming) | **SQL** | **Github**

POMA
Grenoble, France

AERODYNAMIC ENGINEER INTERNSHIP
Feb 2019 - Aug. 2019

- **CFD aerodynamic analysis** using *STAR-CCM+*. Wind tunnel and CFD data comparison using **linear and logistic regression algorithms**
- **Tools** → **Python** | **Matlab** | **Microsoft Excel** | **VBA** | **STAR-CCM+**

Education

Ecole Centrale Nantes - ECN
Nantes, France

DOUBLE DIPLÔME D'INGENIEUR
Sept. 2018 - Sept. 2020

- Specialization in **Computer Science for Information Systems**
- Databases, Object oriented programming, Discrete mathematics, Web programming, Software engineering, Systems and data security
- **Python** | **JavaScript** | **HTML** | **CSS** | **Java** | **Git** | **Unit testing**

Universidad Politécnica de Madrid - UPM
Madrid, Spain

B.S. + M.S. IN AEROSPACE ENGINEERING
Sept. 2013 - Août 2019

- Fluid Mechanics, Optimization Techniques, Propulsion Systems, Algebra, Programming, Flight Physics, Thermodynamic
- **Python** | **Fortran** | **Matlab**

IT Skills

Programming	Python, JavaScript, SQL, Fortran
Web Application	Dash-Plotly, React, Express, HTML, CSS
Specific Software	Spotfire, Postman, Qlik, Power BI, Git, Github, LaTeX

Languages

Spanish	Mother tongue
French	Fluent - Niveau C2 - TFI
English	Fluent - Niveau C1 - IELTS

Personal Projects

Personal Finances Dashboard	Dash-Plotly · MySQL · Python · CSS
Home Recipes Web Application	React · Express · Tailwind · MongoDB · Node
Website Portfolio	React · HTML · CSS

Interests

Sports	High level training basketball for 10 years
Nature	Hiking, Running, Cycling
Reading	Economy, Philosophy, History