ÁLVARO
FIEIRA WACHTENDORFF

✉ alvarofw@gmail.com
📞 +44 7938 776954
💻 **alvarofieira.github.io/portfolio**

I am a **Data Engineer** with experience in building cloud-native data solutions, working on AI-driven projects, and delivering results that meet client needs. I specialise in scoping data projects, designing data pipelines, and integrating ETL processes. My hands-on experience includes **SQL**, **Python**, **C#**, and **Microsoft Azure**. I have a proven track record in consulting and client interactions, helping organisations transition to modern, scalable data solutions while maximising business insights and decision-making.

PROFESSIONAL EXPERIENCE

DATA ENGINEER, PLINC (A NEXT15 BRAND), **Oct 2021 – Present**

- **Promoted** from Junior Data Engineer to Data Engineer after only one and a half years at Plinc, where I am responsible for delivering data projects and analytics solutions for prominent retail, automotive and restaurant clients across the UK and Europe.

- Project Scoping & Execution: Scoped out and delivered projects exceeding **£150K (A$295K)** in 2024, leveraging data engineering expertise to create impactful data pipelines that improve customer insights and enhance client decision-making. Some examples include:
  - **Browse Data Integration:** Designed and deployed a large-scale ETL integration of GA4 browse data into the database of a major UK automotive retailer, managing **1M+** daily views. This integration connects browsing data to customer profiles via cookie IDs, enabling data-driven marketing, with some campaigns achieving an annual revenue uplift of **£520K (A$1M)**.
  - **Autocentre Real-Time Pipeline:** Transitioned the client's autocentre data from daily file uploads to a real-time data stream, enabling real-time customer interactions across **540+** UK locations while maintaining customer matching levels to accurately link transactions to existing customer profiles.

- Cloud Migration: Played a crucial role in migrating **7M+** customer records and the entire transaction history for a large UK restaurant chain from on-premises systems to Azure. This involved establishing cloud databases, setting up ingestion jobs, and configuring Azure Data Factory pipelines.

- Technical Skills:
  - **SQL**: Used daily for ETL and complex data transformations.
  - **C#:** Developed backend systems and APIs to support client interfaces.
  - **React**: Created an interface for client tools, including campaign analysers.
  - **Client Interaction:** Regularly participate in client meetings, discussing project feasibility and tailoring solutions to their needs.

AI AMBASSADOR, PLINC (A NEXT15 BRAND), **July 2024 – Present**

- Advocated for the adoption of AI technologies to streamline workflows.
- Developed a C# chatbot that enables clients to inquire directly about their own data, retrieving real-time counts and insights through backend database queries.

PORTFOLIO PROJECTS

NEAR-EARTH OBJECTS (NEO) DATA PIPELINE, github.com/AlvaroFieira/NASA_Asteroid_Tracker
- Built a data pipeline system to process, classify, and visualise Near-Earth Object data from NASA's NEO API:
  - Utilised **Python** and **Kafka** for real-time data ingestion and processing.
  - Applied machine learning models with **PySpark** to classify NEOs based on characteristics.
  - Developed a **Flask**-based web dashboard for interactive data visualisation.

RESTAURANT BOOKING AI CHATBOT, github.com/AlvaroFieira/Restaurant_AI_Chatbot
- Built an AI chatbot to manage restaurant information, bookings, and cancellations:
  - Designed with **C#** and **Semantic Kernel** to leverage generative **AI** for user-friendly interactions.
  - Integrated a **SQL** backend to manage booking and cancellation features, enhancing user experience.

REAL-TIME STOCK DATA PIPELINE, github.com/AlvaroFieira/Stock_Data_Pipeline
- Designed and implemented a scalable pipeline for real-time stock price data ingestion and transformation:
  - Orchestrated ETL workflows to fetch, clean, and store stock price data in **AWS S3**.
  - Automated tasks using **Apache Airflow**, leveraging **AWS EC2** for scalability.

Sept 2017 – June 2021

MEng AERONAUTICAL ENGINEERING WITH SPACECRAFT ENGINERING

IMPERIAL COLLEGE LONDON

- Earned **a First-Class Honours** degree through a four-year integrated master's program.
- Became an Aeronautics Student Researcher (Aug – Oct 2020) and led a group of PhD students in designing a laboratory experiment for future Aeronautics students.

AWARDS
- **Aeronautics Student Centenary Award:** Recognised for my excellence in a Group Design Project for reusable rocket propulsion systems.
- **Applications Award:** Granted to the team that produced the best Aerospace Vehicle Design Project.

PROJECTS
- **Final Year Project:** Developed a UAV designed specifically for Venus's exploration. Utilised MATLAB for algorithm development and ISIGHT for blade optimisation, incorporating evolutionary genetic algorithms to enhance performance and efficiency.
- **Design and leadership:** Successfully led various CAD projects, demonstrating strong leadership and project management skills. Additionally, completed a flight test course at Cranfield University, furthering my practical knowledge.

CO-FOUNDER, ASTRON SYSTEMS LTD., **April 2021 – July 2022**

- Co-founded a start-up focused on reusable launcher technologies suitable to the small satellite market.
- Developed investor relations and secured the Wescott Research Grant for prototype development.

CUSTOMER SERVICES ROLES, JOE AND THE JUICE, **Oct 2018 – June 2019**

- Managed operations as a Barista at Joe and the Juice, London, showcasing teamwork, leadership, and adaptability.
- Took charge of store during opening and closing and worked under pressure in a team of up to six during peak times.

CANTERBURY SCHOOL OF GRAN CANARIA, CANARY ISLANDS, SPAIN, **Sept 2002 – June 2017**

SCHOOL ACTIVITIES:
- **Sixth Form Deputy Head Boy:** Delivered speeches at major events and coordinated student activities.
- **Duke of Edinburgh's International Award:** Completed fundraising and awareness initiatives, including a film project on forest fires.
- **Exchange programme:** Participated in a two-week academic exchange in Philadelphia, USA.

SCHOOL QUALIFICATIONS:
- **A Levels:** 5 A*, 1 A including Physics, Further Mathematics, Chemistry, English, Spanish and French.
- **IGCSEs:** Highest Mark in Spain in Physics and Geography and Highest Mark in Europe in Further Mathematics.

LANGUAGES:

Spanish (Native), English (Fluent), French (Intermediate)

PROGRAMMING LANGUAGES:

Python, C#, SQL, HTML, CSS, JavaScript, React, MATLAB

DATA ENGINEERING TOOLS:

Microsoft Azure, Azure Data Factory, Azure DevOps, AWS, SSMS, SSIS, Git, PySpark, Airflow, Kafka, Flask, Jira

OTHER SKILLS:

Full British Driving License, Leadership, Teamwork, Communication, Organisation