

João Pereira dos Santos

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Experience

AMAZON

London, United Kingdom

Business Intelligence Engineer | Transportation & Supply Chain

08/2021 - Present

EU SC FC Launch & Transfer Analytics

- Deployed 3 AWS solutions aimed to automate AWS usage best practices and improve cost savings (+70%) on EC2 and SageMaker instances: [AutoTag](#), [AutoScheduler](#) and [AutoStop](#);
- Warehouse (FC) pre-launch Outbound Transshipments (TSO) max processing capacity alerts and automated Critical Pull Time (CPT - time a shipment must be at the truck) closure: python script interacting with internal supply chain API systems to retrieve current assignments ready to be picked and truck schedules and configurations. Deployed on AWS EC2 (AL2 distro) and scheduled using cron;
- EU SC FC Launch Performance and Pod Transfer QuickSight Dashboards: one-stop-shop KPI compilation to provide a user-friendly interface and reporting on all EU FCs. Aimed not only to support Launch PMs with easy data access during pre/post launch period, but also facilitate post-mortem analysis and FC ramp-up performance comparisons. Data pipelines development and management (Glue, Athena ETL CTAS and Lambda functions to prod-ready Redshift schema).

AMAZON

Luxembourg, Luxembourg

Business Intelligence Intern | Transportation & Supply Chain

02/2021 - 08/2021

EU SC Inbound Cross Dock (IXD)

- Why spread is biased & how to overcome it: development of a new metric - Spread Bias. A complementary metric to warehouse spread (how many FCs on average an item is sent to);
- ITS 2% rule & impact on placement: understanding of hard constraints in optimization models (heuristic approach to reduce latency) and impact on placement metrics. Expected yearly decrease of 4MM units in total cross-border fulfillment (CBF);
- Centralized Fluid Loading (FL) Power BI Dashboard for the overall Productivity (fluid loading share, volume, fill rate and labor), Sustainability (saved number of trucks, CO2 emissions, plastic waste) and Savings (transportation, productivity gain, unloading cost) metrics. Tote Utilization Dashboard aimed at improving users tote filling best practices leading to an increase of truck fill rate and tote optimization.

Leadership

AMAZON

London, United Kingdom

EU SC Analytics BI Administrator

08/2021 - Present

- Empower EU SC Analytics users (+300) to produce and obtain data in the fastest, easiest and cheapest way, while maintaining and improving the BI infrastructure. Own and manage 2 AWS accounts, including 2 Redshift clusters;
- Manage a team of BI interns (+5) by applying Agile project management methodologies (Scrum & Kanban) on [Asana](#). Enforce software development good practices ([git](#) for version control, [pyenv](#) for python version management, [poetry](#) for python packaging and dependency management, [black](#) and [flake8](#) for formatting and linting);

Education

FEUP

Porto, Portugal

MEng Chemical Engineering, Processes & Product

2020

Thesis: [Qualitative and Quantitative Analysis in Copper Electroplating Baths](#)

Relevant Coursework: *Process Strategy and Optimization; Process Dynamics and Control; Oil Refining and Petrochemistry; Industrial Informatics II; Entrepreneurship and Innovation; Engineering Project.*

Awards: Winner of the [2018 Academic Games of Engineering by AEFEUP](#): a group project aiming at designing a continuous hydrothermal liquefaction (HTL) biomass processing unit for Paralab, SA.

Skills & Interests

Technical: Bash, CSS, HTML, Python, R, SQL;

Language: Portuguese (native proficiency), English and French (bilingual proficiency) and Spanish (professional working proficiency);

Certifications & MOOC: [AWS Certified Cloud Practitioner](#); [Data Analyst w/ SQL Server](#); [Interactive Python Dashboards with Plotly and Dash](#); [Celonis Process Mining Expert](#); [365 Complete Data Science Bootcamp](#);

Projects: [Portfolio Website](#); [Tennis Betting Bot](#); [Are You Too Old For Data Science?](#); [COVID-19 - Forecasting One Week of Portugal's Confirmed Cases](#);

Interests: Cloud Computing (AWS); Microservices Orchestration; Process Optimization; Machine Learning; Data Visualization; Data Mining.