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I am a business acumen **Data scientist** with a solid hands-on expertise in data engineering, machine learning and optimization. I thrive in applying cutting edge data science technologies to complex problems resolution in dynamic environments, collaborating both with business and technical experts.

skills experience

#### Methods

- Supervised & unsupervised machine learning
- Simulation and optimization

## Programming

- Python, SQL, JS/TS
- git (github & gitlab)
- Cloud computing (AWS/Azure)
- Docker

#### DS frameworks & tools

- Pandas, numpy, SciPy
- Scikit-learn, Pytorch, XGBoost/LGBM
- Plotly, PowerBI, Matplotlib
- · FastAPI, Streamlit, Dash

### Database engineering

- PostgreSQL
- · Microsoft SQL Server
- NoSOL

# personal projects

- Packaged ML model exposed with FastAPI
- Streamlit application to rebalance a portfolio
- Wide-Resnet from scratch in Pytorch to classify images
- 10 classical ML algos implemented in Numpy

## Data Scientist / Data Projects Leader - Air Liquide

2019 → ongoing

Digital Factory | Paris, France

- Lead Data Science projects from initial framing to deployment: data engineering & analysis, development of optimization/machine learning models and deployment in production
  - > Implemented an optimization model to suggest H2 and CO production policies on a network so to maximize CO2 allowances surplus under the EU ETS Phase 4 scheme to limit risk exposure and provide critical insights
  - > Built a hierarchical forecast model estimating the helium demand on the US market to improve helium supply, reducing ISO hold time and cutting ISO inventory requirement by up to 50%
  - Developed a methodology and simulation model to benchmark new revenue models in order to support the design of disruptive commercial offers while managing risk and suggest price points
  - > **Delivered an end-to-end BI solution** for EU-wide monitoring of medical gases operations in 2 weeks during the COVID crisis to manage bottlenecks
- In charge of internal Data Science competitions federating a community of 300 data science enthusiasts within the company

#### Data Analyst - Air Liquide

 $2017 \rightarrow 2019$ 

Large Industries | Frankfurt Am Main, Germany

- Developed and deployed an end-to-end BI solution to monitor industrial performance with over 1000 users, several dashboards and allowing self BI
- Performed various statistical exploratory data analysis: advanced SQL queries, data mining, modeling and visualizations for business stakeholders
- Product Management of an internal reporting solution and managing a team of external developers for maintenance and feature development

## Planning Engineer intern - Total E&P

april → august 2014

Moho Nord Project | Pointe-Noire, Republic of the Congo

 Developed a planification tool for offshore operations that automatically loads, visualizes and detects potential planning interferences to ensure smooth operations of subsea equipment installation

## languages

French native

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English

business fluent

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Spanish basic

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## **MSc. in Mechanical Engineering**

2014 → 2016

education

Shanghai Jiao Tong University | Shanghai, China

Specialization in numerical analysis applied to fluid dynamics, heat transfer and solid mechanics

#### Master's degree in Engineering and Management

 $2012 \rightarrow 2014$ 

Ecole Centrale de Lille | Lille, France