

ALEXANDRE SEPÚLVEDA DE DIETRICH

New York, NY | (929) 446-5846 | aes2399@columbia.edu | linkedin.com/asepulvedadedietrich/

EDUCATION

Columbia University

New York, NY

MS in Business Analytics

Expected Dec 2026

Coursework: Data Analytics, Probability Statistics & Simulation, Marketing Analytics, Business Analytics

Upcoming Coursework: AI Engineering, Deep Learning for OR & Financial Engineering, Quantitative Pricing & Revenue Analytics

Université Paris-Saclay : CentraleSupélec

Gif-sur-Yvette, FR

Diplôme d'Ingénieur - MS in Engineering, GPA: 3.93/4.0

Sep 2022 - Apr 2026

Top French Engineering School (Grande école): Ranked #2 in France, #12 globally (Shanghai Ranking)

Coursework: Machine Learning (rank 1/203), Algorithms, HPC & Cloud computing, Signal Processing, Game Theory

Lycée Charlemagne & Lycée Saint-Louis

Paris, FR

Intensive preparatory course, Physics & Engineering (Equivalent to a BS), top 2% on national exams

Sep 2019 – Jul 2022

2–3 year intensive physics, math, and engineering program preparing for France's top engineering school exams (CPGE)

WORK EXPERIENCE

SIGMA Group, Commercial Excellence Europe

Madrid, ES

Key Account Manager Intern

May 2025 - Aug 2025

- Analyzed commercial performance across 6 countries (~60 resellers) to surface ROI levers and inform negotiation strategy for local KAMs. (Power Query, Power Pivot / Excel)
- Built 5 dynamic dashboards adopted by negotiation teams, standardizing KPIs (GP, NSV, volume) and providing visibility teams previously lacked for data-driven negotiations

CHANEL Europe, Advanced Analytics & Data Science

Paris, FR

Data Scientist Intern

Sep 2024 - May 2025

- Directed end-to-end development of CRAFT, an outlier detection system analyzing 30M+ accounting entries for corporate finance teams, from problem scoping to production deployment.
- Built and deployed custom anomaly detection pipelines for mixed data, outperforming Isolation Forest and DBSCAN; tracked experiments in MLflow and deployed via AzureML. (Python, Pandas, scikit-learn, categorical encoders)
- Developed clustering & multivariate techniques for 300+ monthly sales time series (KMeans / KMedoids, Euclidean & DTW), enabling cluster-level forecasting templates in small-data contexts. (sktime, tslearn, statsmodels)

PROJECT AND RESEARCH EXPERIENCE

Université Paris-Saclay L2S Lab & Forvia

Gif-sur-Yvette, FR

Camera-Radar Fusion Vehicle Tracking Project

Feb 2024 - Jun 2024

- Engineered a camera–sonar tracking stack, 1 camera + 2 sonars fused via optimal transport, reaching lidar-like sensing.
- Achieved ~20 cm positional accuracy within a 3 m × 2 m test area (OpenCV, custom optim routines)
- Coordinated with a team of 3 and conveyed findings to stakeholders

Université Paris-Saclay L2S Lab & Paris Public Hospitals

Gif-sur-Yvette, FR

Respiratory Monitoring System Optimization

Oct 2023 - Jan 2024

- Processed and engineered features from airflow/volume signals for 100 ICU patients, creating a 2D feature space to characterize ventilator synchrony
- Employed Mazet (asymmetric linear) regression for anomaly-robust modeling and trained an SVM classifier reaching 95% recall, prioritizing sensitivity for clinical safety. (MATLAB, Python, scikit-learn)
- Orchestrated a team of 4 to produce functional code and comprehensive reports for near-clinical adoption

LEADERSHIP AND ACTIVITIES

Genius CentraleSupélec (Entrepreneurship Society)

Gif-sur-Yvette, FR

Vice-President

Oct 2022 - Feb 2024

- Led a 40-member team to drive 1,000+ student engagements and partner with 40+ companies (TEDx, Innovation Fair), increasing attendance and profitability by 25%

OSER le Supérieur initiative

Essonne, FR

Organizer & Physics instructor

Jul 2023

- Coached 15 underprivileged students in math and physics through a two-week academic and career-prep camp, preparing for France's elite CPGE programs

SKILLS

Programming: Python (Pandas, NumPy, SciPy, scikit-learn, statsmodels, Polars, sktime/tslearn), SQL, MATLAB, Git

Data/Time Series: wrangling & feature engineering; time-series (ARIMA, DTW); validation & backtesting; probability & statistics

Analytics/MLOps: Excel (Power Query/Power Pivot); MLflow; Azure ML; LaTeX; SharePoint/Power Automate/Apps

Currently learning (markets): option pricing (BSM/Greeks), fixed-income (yield curve, duration/convexity), VaR & P&L explain

Languages: French (Native), Spanish (Proficient)