

Machine Learning & Data Engineer

6 years of experience

3 industries

7 certificates

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As a Machine Learning & Data Engineer with 6 years of experience, my work consists of designing and implementing data-driven solutions to help companies leverage the power of their data.

Practical information:

- Age : 28 years
- Nationality : French
- Residency Status : B Permit holder
- Years of experience : 6 years
- Highest academic degree : Master Of Science in Information Technology

EXPERIENCES

ML & Data Engineer

UBS - Since May 2023 - Full-time - Zurich - Switzerland



- Within UBS' Group Compliance, Regulatory and Governance, my role is to build data-driven solutions for non-financial risk management.
- Mission 1 : implement Databricks workflows to monitor KPIs for Compliance Risk AI models. Tools: python (pandas, pyspark), Gitlab, Databricks
- Mission 2 : refactor AI model's data sourcing using an event-based paradigm. Tools : python (Airflow) Kafka

Data & Machine Learning Engineer

Coface - October 2019 to April 2023 - Full-time - Paris - France



- Within the Datalab team of the Strategy & Development department, I worked on several Data & ML projects. Work ranges from proof of concept (PoC) to building data pipelines and deployment in production. Following are a few examples of missions I worked on.
- Mission 1: Recommender System. Implementation of a recommender system that suggests companies with high default risk. The algorithm is based on criteria of similarity with the companies already reviewed by the risk underwriters. Tools: Python (pandas, sklearn, pySoT), Gitlab, optimization, Surrogate Modeling, Gower Distance
- Mission 2: Complementary insurance. Automating of product profitability reporting, analyzing customer behavior and segmentation, predictive analysis of price sensitivity. Tools: Python (pandas, sklearn, airflow), Gitlab, Airflow, Docker
- Mission 3: Balance sheet forecast following the Covid crisis. Modeling the impact of the Covid crisis on company balance sheets in order to adapt the Risk underwriting strategy. Tools: Python (pandas, pymongo), Gitlab
- Mission 4: REST API for an external client.
Design and implementation of REST API for a customer in the banking sector that allows them to search and identify a company, buy default risk scores and payment behavior insights. Tools: Python (Flask, pandas, cx-oracle, sqlalchemy), Docker, Kubernetes, AWS (API Gateway), Elastic Search, Oracle, Gitlab

Data Science Consultant

Wavestone - March 2018 to March 2019 - Cooperative Education Work - Paris - France



- Within the Machine Learning & Data Lab team, I contributed to the development of the AI offer. I carried out internal R&D work and participated in missions with external clients.
- Mission 1 : review of the state of the art of Deep Reinforcement Learning with an application to autonomous driving. Tools: python, tensorflow, keras, pytorch, opencv, torcs, airsims.
- Mission 2: implementation of a scanned contract processing tool for a player in the pharmaceutical industry. Tools: python, jupyter notebook, tesseract ocr, nltk, tensorflow, glove.

Machine Learning & NLP Intern

Orange - August 2017 to January 2018 - Internship - Paris - France



- Within the "Centre de Compétences d'Informatique Cognitive" (Skill Center of Cognitive Computer Science), I carried out POCs (proofs of concepts) on the use of NLP to analyze customer verbatims. Tools: Python, NLTK, Gensim, Keras, Tensorflow, Pandas.
- I contributed to the development of conversational agents intended for Orange employees. Tools: IBM Watson, dialogflow (Ex api.ai) from Google, python, keras, tensorflow, pygal.

SKILLS

Programming Languages & Frameworks

- Languages : python, SQL, Java
- Frameworks : Databricks, Matlab

ML & Data Engineering

- Data Extraction : cx-oracle, sqlalchemy, pymongo, requests
- Data Processing & Analytics : pandas, pyspark
- Orchestration : Airflow, Databricks
- Model Serving & APIs: Flask and FastAPI
- Machine Learning Modelling : scikit-learn, LightGBM, tensorflow, keras, pytorch

Packaging, Continuous Integration & Continuous Delivery CI/CD

- Git / Gitlab
- Docker
- Jenkins
- Puppet

Databases

- Oracle
- MongoDB
- Elasticsearch

LANGUAGES

🇬🇧 English
fluent

🇫🇷 French
native

🇩🇪 German
beginner

INTERESTS

Games

Hearthstone, 7 wonders, splendor

Chess

President of chess club at school

- Within the Signal & Communications department, I carried out research work on Spectral Clustering algorithms which resulted in the publication of a conference paper.
- My mission was to implement a similarity function (kernel) for these algorithms and evaluate its performance. Tool: matlab.
- Link for the paper : <https://ieeexplore.ieee.org/document/8450769>

EDUCATION

From 2015 to 2019 **Master Of Engineering** IMT Atlantique (Ex Télécom Bretagne) - Brest - France
Generalist degree in Information technology with a specialization in Machine Learning and computer vision.

From 2017 to 2017 **Erasmus Exchange Semester** Reykjavik University - Reykjavik - Iceland
Academic semester at the School of Computer Science in Reykjavik University.

From 2015 to 2016 **Bachelor's in Mathematics** Université de Bretagne Occidentale - Brest - France
I took the courses of this bachelor in parallel with my main Master of Engineering at IMT Atlantique (Ex. Telecom Bretagne - Intitut Mines-Télécom) in order to deepen my knowledge and understanding of the following disciplines: topology, general algebra, differential calculus, statistics and stochastic modelling.

From 2013 to 2015 **Preparatory Classes For "Grandes Ecoles"** Classes Préparatoires Aux Grandes Ecoles - MPSI/MP
Intensive preparatory courses for the french "Grandes écoles" contests.

CERTIFICATIONS

Apr 4, 2018 - [deeplearning.ai](#)

April 4,2018 - [Sequence Models](#)

November 24, 2017 - [Convolutional Neural Networks](#)

Aug 22, 2017 - [Structuring Machine Learning Projects](#)

Aug 21, 2017 - [Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization](#)

Aug 17, 2017 - [Neural Networks and Deep Learning](#)

Oct 29, 2016 - [Machine Learning](#)