Bechir Trabelsi

Summary

I have a Master degree in data science from L'institut Polytechnique de Paris, an engineering degree in applied mathematics from ENSTA Paris. I have 2 years of experience with IBM where I worked on various machine learning fields and problems like clustering, client segmentation, recommendation engines, anomaly detection, deep learning models, computer vision, classification, hidden markov models and survival analysis. I'm also experienced with the Google cloud platform and TensorFlow, have the professional data engineer certification, the IBM advanced machine learning specialist badge and very solid knowledge of MLOPS on GCP. I am currently further expanding my knowledge in devops with GitLab and Kubernetes and more generally software engineering topics.

Experience

IBM Paris
Full Stack Data Scientist Dec 2021 - Present

Data Science consultant — Google Cloud Machine Learning Engineer

Worked / working on:

- O Developing ML pipelines on Google cloud platform: dataflow, vertex Ai, Kubeflow...etc.
- Anomaly detection on multivariate time series using LSTM-GRU composite autoencoders.
- Survival analysis.
- Time series forecasting.
- Computer vision: Object classification and feature extraction from satellite images using CNNs and Convolutional Auto-Encoders.
- Predictive maintenance using both probabilistic models such as hidden Markov processes and supervised learning algorithms.
- Client segmentation and profiling using unsupervised learning methods.
- O Product recommendation using Tensorflow recommender, Association rules via apriori algorithm.
- Pattern identification.
- O Data analysis.
- O Developing Data processing pipelines via Apache Beam Python.

IBM Paris

Data Science Consultant Intern

Feb 2021 - Oct 2021

Participated in:

- O Proof of Concept around predictive analysis or data integration/analysis tools.
- Restitution of the results of studies and data analysis.
- Functional and technical design phases of an integration project.
- Implementation of the solution set up (experimentation, industrialisation, deployment, etc.).
- Test phases (integration / acceptance).
- Handling and resolution of defects.
- Implementation of potential evolutions.

École Polytechnique

Research Intern

Paris

May 2020 - Aug 2020

The goal of the internship is to model and estimate risk measures relying on rich function classes (so-called reproducing kernel Hilbert spaces, RKHSs) associated to kernel functions, under shape conditions. We are planning to explore the efficiency of the RKHS family with various profit/loss functions (such as profit of a call or put option), risk measures (including conditional quantile, expected shortfall and expectile), under different evolutions of the financial assets (described for example by d-dimensional geometric Brownian motion).

Education

Institut Polytechnique de Paris

Paris

Master of Science - MS, Data Science

2020 - 2021

Officially part of École polytechnique (I'X) with courses in École Polytechnique (I'X), Telecom Paris, ENSAE Paris and ENSTA Paris.

ENSTA Paris Paris

Master of Engineering - MEng, Applied Mathematics

2018 - 2021

Courses focused on advanced optimization, operations research, and statistics.

Licenses Certifications

Udemy

Apache Beam — A Hands-On course to build Big data Pipelines

Google

GOOGLE CLOUD CERTIFIED PROFESSIONAL DATA ENGINEER

IBM

IBM Machine Learning Specialist - Advanced

Skills

- MLOps
- Deep Learning
- Google Cloud Platform (GCP)
- Gitlab
- Cloud Computing

- Machine Learning
- Statistical Data Analysis
- Optimization
- Big Data Analytics
- Computer Vision