Laëtitia Lachat
Data Engineer

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Work Experience

Data Engineer
Montréal (QC), Canada

MoovAI (Consulting Company specialised in AI)
November 2021 - Present

- Designing the MLOps architectures, allowing the production of trained models ready to generate predictions, on **various cloud platforms (GCP, AWS, Azure)**:
    - Deploying infrastructures with **Terraform**.
    - Deploying CI/CD pipelines (with **Travis CI, Cloud Build, GitHub Actions**).
    - Deploying data ingestion and processing pipelines (with various tools such as **Airflow, Databricks, SageMaker, Kedro, MLFlow, Snowflake**).
- Collaborating within teams applying **Scrum management method**.
- Handling communication and knowledge transfer with client teams.

Data Engineer
Lille, France

La Redoute (E-commerce website)
January 2020 - November 2021

- Designing and deploying batch and streaming pipelines by using **Google Cloud Platform**.
- Developing with **Python** for **Airflow**, Cloud Functions; **SQL** for BigQuery; Java for Dataflow. Using streaming ingestion with Pubsub, Kafka.
- Working on the **product domain data** (i.e. online and in-store products nomenclature) with the creation of a mapping of projects related to this scope in order to monitor and upgrade quality of the pipelines.
- Collaborating within a team applying **Scrum management method**.

Example of project: Industrializing a monitoring tool for KPI of publication for the business teams of La Redoute.
Objectives achieved: Improvement of the quality of pipeline with the creation of documentation and a decrease of mensuals costs of the tool by 100.

Data Developer (Internship)
Paris, France

Société Générale - Trading Room (Bank)
February 2019 - July 2019

- Creating a web interface allowing to **summarize the profile of a client through statistics** by programming on the back-end part (with **Python/Spark via PySpark**/Flask RESTPlus).
- Discovering and learning **financial terms and concepts.**

Data Scientist (Internship)
Singapore

Tessa Therapeutics (Biotechnology Research Company)
April 2018 - August 2018

- Installing new tools and training colleagues to use them e.g. GitHub/Jenkins/MLflow (a machine learning platform).
- **Analysing the performance of different dimension reduction and clustering algorithms** (*e.g. classic algorithms like TSNE/UMAP or K-means/DBSCAN; specific algorithms to biology like Phenograph; Convolutional Neural Networks with TensorFlow*).
- Building an internal library to easily use dimension reduction and clustering algorithms (with **Python**).

Full-stack Developer (Internship)
Geneva, Switzerland

QIM Info (IT Consulting Company)
June 2017 - August 2017

- Creating a **web software** for HR Management in Full-stack development (with **Angular2, .NET**, Visual Studio).
- Working in a team using **Scrum management method**.

Laëtitia Lachat
DATA ENGINEER

Education

Master of Engineering in Computer Science
Lyon, France

INSA LYON
2014-2019

- Courses: Algorithms, Database management, Software development.
- Projects: Indexing and querying text, Streaming Infrastructure, Facial image recognition with CNNs, Data mining.

Exchange Program in Computer Science and Statistics
Dublin, Ireland

TRINITY COLLEGE DUBLIN
2017-2018

- Courses: Forecasting, Data Mining, Machine Learning.

Certifications

Google Cloud Platform   Professional Data Engineer (2021-2023)

Skills

Cloud Platform	GCP (2 years), AWS (4 months), Azure (4 months)
Big data tools	Spark (via PySpark); Apache Beam (via Dataflow) / Kafka; PubSub / Apache Airflow; Cloud Functions / Kedro
Datawarehouses	BigQuery; Snowflake
DevOps tools	Git / Docker / Travis CI; Cloud Build; GitHub Actions; Jenkins / Terraform / MLFlow
IDE	Visual Studio Code with Dev Containers
OS	Windows; Linux
Project management tools	Agile SCRUM Method with JIRA
Languages	English (Fluent) (TOEIC: 985/990) / French (Mother Tongue) / Spanish (Proficient) / Mandarin (Basic Notions)

Programming Languages

Most experienced	Python; SQL
Some experience	Java; C++; .NET (C#); R; Angular2; HTML5; Matlab; Arduino; Prolog
Dabbled	Javascript, Haskell

Example of Projects

Indexing and querying text

PROGRAMMING LANGUAGE : PYTHON
Group work

Building an information retrieval system allowing to research key concepts inside a set of articles.

Data Mining for AntiGBM disease

PROGRAMMING LANGUAGE : R

Investigating the possible causes of the AntiGBM disease by applying a dimension reduction algorithm (PCA), clustering algorithms (hierarchical/ K-means) and a logistic regression to study the relationships between variables.

Personal Interests

Yoga, swimming and hiking.