CONTACT

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SKILLS

AI/MI:

Image processing, NLP, Transformers, Cloud technologies.

Data engineering:

Data modelling, Data Warehousing, Data Pipelines, Data Quality, Business intelligence.

Software developing:

Project Management, Agile Programming, Multi-Thread programming.

TOOLING

Excellent Knowledge:

Python, Java, Scala, Git, MySQL, PostgreSQL, PySpark, Hadoop, Terraform, Azure, MS Fabric, Azure Data Factory, Databricks, Snowflake, DBT, Airflow, Luigi, AWS S3, Gradle, Linux, REST API, MATLAB, Jira, Confluence, Excel, network protocols IP, Tableau, PowerBI.

Good Knowledge:

Docker, Kubernetes, GRPC, Haskell, R, MiniZinc, C#, C, C++.

ANAS MOFLEH

DATA ENGINEER WITH AI/ML BACKGROUND

A key player in a BI unit, acting the role of a Data Engineer to create and monitor pipelines, to construct data flows with high quality data and provide BI insights. Will make it easier for stakeholders to take business decisions and direct the business in the right direction. Kan even utilize the power of AI as well, to ultimately turn data to business value.

WORK EXPERIENCE

DATA ENGINEER

Region Skåne | 2023-06 - Present, LundDatalake for healthcare system that holds patients.

DATA ENGINEER / BI DEVELOPER

Sinch AB | 2021-10 - 2023-06, Malmö

Create and manage pipeline and create and maintain dashboards in a BI unit, that help sales and financial teams with their decisions.

MACHINE LEARNING ENGINEER

Sinch AB | 2021-05 - 2021-10, Malmö

Implement and maintain state-of-the-art transformers based models for sentiment classification.

EDUCATION

COMPUTER SCIENCE AND ENGINEERING

Lund faculty of engineering | **2017 - 2021, lund** M. SC. in Artificial intelligence and Machine learning

CERTIFICATIONS

2024-10	GITHUB ACTIONS GitHub
2024-08	DATABRICKS CERTIFIED DATA ENGINEER ASSOCIATE Databricks
2024-07	GITHUB FOUNDATIONS GitHub
2024-06	DATABRICKS LAKEHOUSE FUNDAMENTALS Databricks
2024-05	FABRIC ANALYTICS ENGINEER ASSOCIATE Microsoft

AZURE DATA ENGINEER ASSOCIATE

Basic Knowledge:

Snowpipe, Adruino, HTML JavaScript, React Native, AWS Lambda, Kafka

LANGUAGES

Arabic: Native.

English: Professional **Swedish:** Professional



PROJECTS

Datalake for healthcare data:

Store and analyze healthcare data in Scania region from two main systems () to enable ML learning models to predict firstly. The probability of chock. secondly, the probability of leaving the hospital within 3 days.

- Because of the data sensitivity the architecture were mainly on-prem with a one time extraction to an on-prem SQL server.
- Data were extracted and encrypted using SSIS packages generated using tools developed in house.
- Then transformed using SQL and aggregate it to a Kimbal modell.
- Finally, validate and insure Data quality using Jupyter Notebook.
- . Train ML models using SVM on-prem.
- · Create Dashboards in pyton together with a chief physician "överläkare".

Methodology: Agile

Data Pipeline developing and maintenance:

Store and analyze telecom financial data from a different teams (billing, credit control, sales, marketing, ...) to generate insights on different dimensions such as region, country, product. Using ELT pipelines, the main steps were:

- Set a daily, monthly, or hourly procedures using Luigi, to store the Data in a temporary AWS S3 bucket.
- Move the data to a permanent Bucket in a parquet format, using python.
- Transform the data, merge with the master files and aggregate it, using PySpark.
- · Validate and insure Data quality using Jupyter Notebook.
- · Store the data in MySQL or Snowflake DB.
- Create Dashboards in Tableau, based on the stakeholder's requirement.

Methodology: DevOps

Migration project: MySQL -> Snowflake

Have been a part of the big migration process from MySQL to Snowflake. The scope has been to move all the tables, views, and procedures to Snowflake. The step has been:

- Review the Current MySQL database and remove redundancies to start with.
- Document all Tableau data sources that need to be updated to point to the Snowflake database.
- Review, document, and create all database artifacts that need to be recreated in Snowflake.
- Document all pipelines in the data lake that needed to be updated to point to the Snowflake bucket.
- Update Pipelines so that they also point to the new Snowflake bucket.
- Test and validate the data along with the different dimensions.
- Update Pipelines to remove MySQL egress jobs after going live with Snowflake.

Methodology: DevOps

Data Pipeline creation and maintenance:

Create and maintain CI/CD pipelines to ingest data from different source (Excel, APIs, DB, ...) to the data lake. Then moving the data between the different AWS S3 buckets, using Luigi as an orchestration tool. The main layers of the ETL were:

- First layer: Validate the data and the integrity of it, then ingest and store the raw data as it is.
- Second layer: Transform the data and apply business logic to it, validate it, then move a copy to a different pond.
- Third layer: Egress the transformed data to a Snowflake database.
- •Finally, create a Tableau DS based of the data in the DB and create dashboards based of it.

Methodology: DevOps

Language-Agnostic Sentiment Classifier for Messaging

A master thesis project done at Sinch. The project aim is to limit hate speech in modern day life, by using a pre-trained transformer based model, to identify the sentiment of a text message, and classify as Positive, Neutral or Negative. The challenge was to produce a Language agnostic model, that works for any given language, with a high classification accuracy and low inference time.

We compared a dozen of different models with different fine-tuning techniques, in order to satisfy the requirements. At the end, the project was a success and our work was pulled into production. (still to our current day).

Methodology: Agile