



Aditya Paliwal

Data Engineer @ Telenet

- Mechelsesteenweg 490, Herent
- +32 465 00 45 26
- <https://www.linkedin.com/in/aditya-paliwal-ai/>
- <https://www.adityapaliwal.net/>
- paliwal_aditya@outlook.com

Summary

With over 4 years of experience in implementing and deploying end-to-end data pipelines in production environments, I am eager to advance my career by combining my expertise in data engineering with cutting-edge machine learning and AI technologies. The goal is to create intelligent, data-driven products that leverage the power of cloud computing to deliver impactful, scalable solutions.

Skills

- Python, Java, C/C++
- AWS Cloud
- Terraform (Infrastructure as Code)
- Oracle DB
- Snowflake
- Docker
- Apache Airflow
- FME
- PySpark
- Pandas
- Polars
- Dask
- NumPy
- SciPy
- Tensorflow
- MySQL
- Scikit Learn
- Qlik Sense
- Spatial Data Analysis
- ArcMap
- Jenkins
- Gitlab CI/CD
- Agile Methodologies (Jira, Sprint Plan)

Languages

- English ●●●●●
- Dutch ●●●●●

Work Experience

- Sept'20 - **Data Engineer** Telenet
Present My responsibilities include maintaining and optimizing the data processing platform. Implementing, scheduling and monitoring the ETL tasks for data product deliveries.
- Feb'20 - **Master Thesis Intern** NXP Semiconductors
Aug'20 Research project to investigate the best ML technique for an accurate Indoor Positioning System. Investigated the possibilities of using supervised vs semi-supervised learning techniques on positioning data.
- Sept'19 - **Part-Time Employee** SoundTalks
Dec'19 Being a part of the hardware testing team, my role was to report bugs in the hardware before and after assembly. Stock and Inventory management using Odoo.
- July'19 - **Summer Intern** NXP Semiconductors
Aug'19 Responsible for modification of existing applications for compatibility with Indoor Positioning scenarios.

Education

- 2021-'22 **Advanced Masters in AI, Major: Big Data** KU Leuven
Course Work: Fundamentals of AI, Intro to Machine Learning, Data Mining, Big Data, Computer Vision, Artificial Neural Networks, Privacy in Big Data
Master Thesis Identify COPD Patient Deterioration using ML
Analyzed ML algorithms on COPD patients' activity data from FitBits, enhancing prediction accuracy through data cleaning and imbalance techniques.
- 2018-'23 **Masters in Computer Science, Major: AI** KU Leuven
Course Work: Fundamentals of Computer Science, Design of Software Systems, Software Architecture, Distributed Systems, Modelling of Complex Systems, NLP, Multi Agent Systems
Master Thesis Using ML techniques for BLE-based Indoor Positioning
Compared and analyzed performance of various ML regression algorithms (supervised and semi-supervised) for an efficient BLE-based indoor positioning system.
- 2014-'18 **Bachelor's in Computer Science Engineering** AKTU
Course Work: C Programming, OOP (C++, JAVA), Data Structures, Design and Analysis of Algorithms, DBMS, Operating Systems, Computer Architecture, Computer Networks
Bachelor Thesis Digitally Secure Voting System
Developed a PoC for an alternative voting system with state of the art security features to eliminate bogus voting.

Projects

- Delivering data products using end to end ETL pipelines, and making them accessible via BI Tools.
- Application migration from batch script based to Python based platform, optimizing data processing using Pandas, Polars and Dask.
- Application migration on AWS Cloud, complying with new organization firewall rules
- Implemented end-to-end mobile data marketplace on AWS, which included automating data updates and integrating API calls to DynamoDB.
- Developed REST API services for data processing, reporting, and database updates in replacing a third-party tool.
- Expanded Telenet's troubleshooting tool to include mobile networks, using REST API calls for data fetching.
- Analyzed customers impacted by the future 3G shutdown, targeting notifications to older handset users
- Automated data extraction and processing for analyzing customers' cellular experience during train travel, aiding network optimization.