Hamza Elharchi Elmaslohi

Data Engineer | Azure & Fabric Certified

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Education

Eotvos Lorand University (ELTE), Budapest   Sept 2023 – July 2025
Master in Computer Science (Data Science)
- Coursework: Machine Learning, Databases, Stream Mining, Advanced Deep Network Development

Mohammed V University Rabat   Sept 2020 – July 2023
BSc in Big Data and Information Systems

Experience

Whale Cloud, Technical Support Engineer (Budapest, Hungary)   Mar 2024 – Sep 2024
- Executed and validated Quality Assurance (QA) testing to ensure software reliability and functionality.
- Troubleshooting technical issues by analyzing logs, stored procedures, triggers, packages, etc.
- Optimized SQL scripts to improve db performance and administered Linux servers across multiple environments.
  Skills: SQL, Oracle, Linux, Bash Script, PL/SQL, Jira

PLAEX Technologies, Software Engineer Intern (Netherlands)   Mar 2023 – Jun 2023
- Developed interactive dashboards: Created dynamic visualizations for real-time IoT bin data analysis.
- Enhanced waste management: Improved waste management efficiency through data-driven insights.
- Developed and deployed a scalable full-stack web application on AWS (EC2, S3, RDS)
  Skills: Django, DRF, AWS, Nginx, PostgreSQL, React, Tailwind, ChartJS

Certifications

- **Microsoft Azure Data Engineer Associate (DP-203)**   Oct 2024
- **Microsoft Fabric Analytics Engineer Associate (DP-600)**   Dec 2024

Projects

Real-time Industrial Control Systems (ICS) Anomaly Detection
- Developed a high-performance, real-time anomaly detection pipeline leveraging Apache Kafka, PySpark, and an Autoencoder-based machine learning model to identify irregularities in ICS data streams
- Containerized the entire pipeline using Docker to ensure seamless portability and deployment across environments.
- Designed and implemented a Grafana monitoring dashboard for real-time visualization, enabling tracking anomaly insights.

Azure End-to-End Data Engineering Pipeline
- Built a data pipeline to migrate Sales and customer data from on-premises SQL Server to Azure using ADF and Databricks.
- Ensured secure data processing with Azure Key Vault, Entra ID (RBAC, and Managed Identity).
- Automated deployment and monitoring with Azure DevOps CI/CD and visualized insights using Power BI.

Skills

Programming Languages: Python, SQL, JavaScript, Java
Data Engineering : PySpark, Azure Data Factory, Databricks, Synapse Analytics, Apache Kafka
Analytics & BI: Microsoft Fabric, Power BI, Data Modeling, Lakehouse/Warehouse
Data Science: PyTorch, Tensorflow, Keras, Scikit-learn, Numpy, Pandas, Matplotlib
Web Development: Django, Django Rest Framework, React, Tailwind CSS, Flask
Others: AWS, Microsoft Azure, Git, Linux, Excel, Docker, Automation, Selenium, web scraping, MS Office

Languages

English	Fluent	**French**	Fluent
Arabic	Native	**German**	Intermediate (B1 Goethe)