

MALEK BEN YOUSSEF

malekbenyoussef00@gmail.com | [LinkedIn](#) | [GitHub](#) | malek-ben-youssef.me | +49 155 10462510 | [Germany, Munich](#)

PROFESSIONAL EXPERIENCE

Data Engineer

Crewmeister

Feb 2025 – Sep. 2025

Munich, Germany

- Developed Airflow ETL/ELT pipelines to ingest and transform data into BigQuery and Snowflake data warehouses.
- Implemented cost efficient data workflows using Airflow automation, reducing BigQuery costs by over 57%.
- Ensured 98% data accuracy through quality checks with Dataplex, Cloud Composer, and Dataflow.
- Integrated 30+ BigQuery data sources into Looker Studio dashboards creating customized KPIs charts.
- Implemented Medallion architecture using dbt for modular models and Terraform for an "everything as code" approach.
- **Skills:** GCP, AWS, BigQuery, dbt, SQL, Apache Airflow, Looker Studio, Python, Docker, Git

Machine Learning Intern

Premier Cloud

Jul. 2024 – Sep. 2024

Victoria, British Columbia, Canada · Remote

- Built an NL2SQL chatbot converting user prompts into SQL queries, resulting natural language responses.
- Deployed the application using Google Cloud Run and managed a CI/CD pipeline with Google Cloud Build.
- Performed SQL query optimization, and Prompt Engineering techniques improving output accuracy.
- **Skills:** GCP, BigQuery, SQL, PostgreSQL, Vertex AI, Docker, Git, PySpark, Pub/Sub

Machine Learning Engineer (Part-Time)

Silver Brain AI AG

Nov. 2023 – Jan. 2024

Geneva, Switzerland · Remote

- Developed a chatbot using Llama 2 LLM (7B parameters) to provide detailed service information to clients.
- Employed RAG techniques to optimize LLM text generation, improving output quality by 30%.
- Integrated and deployed the chatbot application in a web app, managing a CI/CD pipeline
- **Skills:** Python, LangChain, LlamaIndex, Prompt Engineering, FastAPI, Git

Full Stack Developer Intern

Safran

July. 2023 – Sep. 2023

Tunis, Tunisia

- Created a dashboard for 100+ users, that offers quick access to the company's equipment status.
- Integrated data visualization and real-time updates.
- **Skills:** Angular, Spring Boot, TypeScript, Git, SQL, REST APIs

EDUCATION

National Institute of Applied Sciences and Technology (INSAT)

National Engineer's Degree in Computer Science

Tunis, Tunisia

Sept. 2020 – Jan. 2025

Relevant Courses: Linear Algebra, Database Management, Algorithms and Data Structures, Deep Learning, NLP, Cloud Computing, Big Data, Spark, PySpark, Hadoop, Kafka, Power BI, NoSQL database

PROJECTS

Autonomous Navigation using Deep Reinforcement Learning

May. 2024 – Jul. 2024

- Developed an autonomous robot navigation system employing the TD3 algorithm.
- Implemented deep reinforcement learning techniques achieving 92% success rate in obstacle avoidance.
- **Skills:** Python, SQL, PostgreSQL, TensorFlow, Gazebo, Markov Decision Processes, Q-learning, Deep Q-Learning (DQN).

Soccer Chatbot

Dec. 2023 – Jan. 2024

- Built an information retrieval system about soccer based on 1000+ PDF file pages.
- Applied Llama 2 LLM and RAG techniques achieving 95% accuracy in information retrieval.
- **Skills:** Python, LangChain, Chainlit, FAISS, OpenAI Embeddings, Llama2

CERTIFICATES

Professional Machine Learning Engineer

Google Cloud

Jul, 2024

Deep Learning Specialization

DeepLearning.AI

Feb, 2024

Scrum Fundamentals

SCRUMstudy

Feb, 2022

SKILLS

Programming Languages: Python, SQL, C, C++, Java

Machine Learning & AI Frameworks: TensorFlow, scikit-learn, LangChain, LlamaIndex, SpaCy, NLTK

Cloud & MLOps: GCP, AWS, Vertex AI, BigQuery, Apache Airflow, PySpark, Docker, dbt, Flask

Languages: English (Fluent), French (Proficient), Spanish (Basic), German (Basic)