# Heni Ben Arab

Senior Data Engineer

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# Professional Experience

- since Oct. Senior Data Engineer, DB Systel GmbH, Frankfurt, Germany.
  - 2021 Design and development of Big-Data Architectures on AWS. *Tech-Stack:* Java, Scala, Python, Spark, Kafka, Docker, Airflow AWS
- Apr. 2017 IT Consultant, ITinera projects & experts, Eschborn, Germany.
- Sep. 2021 Consulting clients in banking, media and transportation industries. *Tech-Stack:* Java, SpringBoot, Spark, Kafka, Docker, Airflow, AWS
- Mar. 2015 Working Student, University of Passau, Passau, Germany.
- Dec. 2015 Research and implementation of Neural Networks models for NLP usecases. **Tech-Stack:** Python, Machine Learning/Deep Learning, NLP, Knowledge Graph
- Jun.2014 Trainee, Prologic Group, Tunis, Tunisia.
- Aug.2014 Implementation and Configuration of the Network&Security Module *vShield* on a VMware Cloud environment.

**Tech-Stack:** Cloud Computing, Virtualization, VMware Cloud Suite (ESX, vSphere, vShield, vCloud Director)

- Jul. 2013 Summer Trainee, Vermeg, Tunis, Tunisia.
- Aug. 2013 Implementation and Configuration of CI/CD-Pipelines. *Tech-Stack:* Java, Maven, Hudson

#### Education

- 2014–2017 M.Sc. in Computer Science, University of Passau, Passau, Germany.
   Specialization: Information and Communication Systems.
   Master thesis: Using Recurrent Neural Network for Knowledge Graph Extraction.
- 2012–2015 **Telecommunication Engineering Degree**, *Higher School of Communication of Tunis (Sup'Com)*, Tunis, Tunisia.

  Double degree agreement with the University of Passau.
- 2010–2012 Classes Préparatoires, *Tunis Preparatory Engineering Institute*, Tunis, Tunisia.

  Specialization: Mathematics-Physics

  Success in the competitive national examination for access to engineering studies. (ranked 89th out of 4000 students)
  - 2010 **Baccalaureate Degree**, *L'Aouina High School*, Tunis, Tunisia. Mathematics, with distinction (16.28/20)

## Technical skills

Programming Java, Scala, Python

Java Spring Framework (Spring Boot, Spring-Data, Spring-Security, Spring-Batch), JPA,

Frameworks Hibernate, JUnit, Maven

& Standards

Database MySQL, PostgreSQL, MongoDB, InfluxDB

Big Data Hadoop-Ecosystem (HDFS, YARN, Spark, Hive), Kafka, Nifi, Hudi

Cloud Amazon Web Services:

EC2, S3, RDS, EMR, ECS, Lambda, CloudWatch, Glue, CloudFormation, Compre-

hend.

**Google Cloud Platform:** 

ComputeEngine, CloudStorage, CloudSQL, BigQuery, PubSub, CloudDataproc

Other Git, Jenkins, Gitlab CI/CD, Docker, Airflow, Grafana, Camel

**Frameworks** 

& Tools

## Certifications

Jan. 2023 AWS Certified Solutions Architect - Associate

Aug. 2020 AWS Certified Cloud Practitioner

Jan. 2020 Google Cloud Certified Professional Data Engineer

Aug. 2018 Certified Scrum Developer

Sep. 2017 Certified Scrum Master

Mar. 2016 Deutsche Sprachprüfung für den Hochschulzugang (DSH 2: 78%)

Jan. 2014 Test of English for International Communication (TOEIC: 925/990)

## Languages

German Fluent

English Fluent

French Bilingual

Arabic Native

#### Activities and interests

since Apr. Member of TS-Griesheim Club (Tennis & Table tennis)

2023

since Feb. Co-founder of "Rainbow Events" (Organization of trips and excursions)

2013

2013-2014 Chair of IEEE Sup'Com Student Branch

Hobbies Reading, DJing, Tennis

# Projects

since Nov. MOVAS Data-Platform, Extension and further development of Vendo Datalake.

2021 Industry: Transportation

- ♦ Role: Software-Engineer / Data-Engineer / DevOps-Engineer
- Design and implementation of a containerized data management tool with Java and SpringBoot.
  - Design and implementation of Lakehouse usecases with Hudi.
  - Design and implementation of real-time streaming usecases with Spark Streaming.
  - Connecting external systems to Datalake with Apache Camel.
  - Interim takeover of Product Owner tasks.
  - Migration of CI/CD-Pipelines from Jenkins to GitlabCI/CD.
- ♦ Tech-Stack: Java, Scala, Python, Spark, Hudi, Kafka, Camel, Docker, AWS, Airflow, GitlabCI/CD.

Jun. 2021 Data driven Ads Platform, Extension of a data driven Ads Platform on GCP.

- Sep. 2021 ⋄ Industry: Media
  - ⋄ Role: Data-Engineer
  - ♦ Tasks:
    - Extension of existing datalake architecture on GCP.
    - Implementation of Data Quality Control workflows with Great Expectations.
    - Orchestration and Scheduling of Workflows with Airflow.
  - ♦ Tech-Stack: GCP, Python, Airflow, Great Expectations.

Jul. 2019 Vendo-Datalake, Design of a Datalake for the sales platform "Vendo".

- Mai. 2021 ⋄ Industry: Transportation
  - ⋄ Role: Software-Engineer / Data-Engineer
  - - Design of the Datalake architecture.
      - Stage 1: Based on Hortonworks Suites HDF and HDP.
    - Stage 2: Migration to AWS.
    - Development of ETL-Applications with Apache Spark.
    - Orchestration and Scheduling of ETL-Worflows with Airflow.
    - Development of Data Pipelines with NiFi.
  - Design and implementation of a KafkaStreams-based Application to anonymize personal data.
    - Monitoring of workflows, services and infrastructure with Grafana.
  - ◇Tech-Stack: Java, Scala, Spark, Kafka, Kafka-Streams, NiFi, Hadoop/HDFS, YARN, Hive, Docker, AWS (EC2, EMR, S3, Lambda), Python, Airflow, Grafana, Jenkins, MongoDB, InfluxDB.

Mai 2018 ReACT, Building a BigData Platform to prevent against money laundering and Jul 2019 terrorism financing.

- ♦ Industry: Banking
- ⋄ Role: Software-Engineer / Data-Engineer
- ♦ Tasks:
  - Design and development of an ETL-Framework with Java und Apache Spark.
- Development of a DSL to help with data modeling and automatic generation of test
- ⋄ Tech-Stack: Java, Spark, Hive, Xtext.

- Sep. 2017 Digital Strategy Cross Channel Banking, Implementation of new Backend-
- Mai. 2018 Features for the Online Banking System.
  - ♦ Industry: Banking
  - ⋄ Role: Java-Developer
  - ♦ Tasks:
  - Implementation of a SpringBatch-based batch architecture for importing foreign bank accounts and transactions.
    - Design of data model on Oracle.
  - ⋄ Tech-Stack: Java, Spring, Spring-Batch, Spring-Data, Hibernate, OracleDB, Jenkins.
- Apr. 2017 **Timecard**, Development of an internal management tool.
- Aug. 2017 ⋄ Industry: -
  - ⋄ Role: Java-Developer
  - ♦ Tasks:
    - Development of a WebApplication with Spring and PrimeFaces.
    - Design of data model on MySQL.
  - ⋄ Tech-Stack: Java, Spring, Spring-Data, Spring-Security, PrimeFaces, Hibernate, MySQL, Jenkins.