## Nikolai Klassen

Paula-Fürst-Str. 4, 10317 Berlin

# **Experience**

#### **Deutsche Rentenversicherung**

Data Scientist / Machine Learning Engineer

Berlin, Germany

Nov. 2024 - Ongoing

- Spearheaded the deployment of a multilingual generative AI platform on AWS, enabling the development of LLM workflows across multiple teams and enhancing cross-functional collaboration aimed at serving 20.000 user requests an hour.
- Designed and implemented scalable Retrieval-Augmented Generation (RAG) pipelines, optimizing the processing and retrieval of insights from large-scale text datasets, significantly improving and automating data processing pipelines for unstructured data.
- Collaborated with Architects to shape the generative AI setup, integrating cloud technologies into both AWS and on-premise solutions, ensuring a seamless hybrid infrastructure and integration.
- Led the usage of Request for Comments (RFCs) and Architectural Decision Records (ADRs) for Generative Al projects, driving the adoption of innovative practices in software development processes.
- Mentored and guided junior data scientists in both LLM and classical ML projects, fostering their technical skills and professional growth through structured feedback and collaborative problem solving, leading to improved project results and greater confidence.

Billie Berlin, Germany

Data Engineer / Data Scientist

Oct. 2022 - Oct. 2024

- Developed and maintained backend services in accordance with MLOps best practices, achieving 99% availability for 20,000 daily orders.
- **Designed CI/CD pipelines** to ensure reliable testing and deployment of **ML-powered systems** utilizing **GitHub Actions**, **Kubernetes**, and **Jenkins**.
- Collaborated with stakeholders to gather both technical and non-technical requirements for new ML services and features.
- Enhanced ML models for classification, resulting in a 20% reduction in defaults and fraud through improved data processing techniques.
- Implemented real-time pipelines to process semi-structured business events from multiple sources using Apache Kafka and Apache Flink.
- Maintained and conducted code reviews for the data platform feature store, providing support to multiple teams.

#### Skills

Programming Languages: Python, SQL, JavaScript, Typescript, Java, Kotlin, Go, HCL

**Software:** Apache Kafka, Apache Flink, Python ML Stack (TensorFlow, PyTorch, Scikit-learn, XGBoost, Pandas, ...), Python Frameworks (uv, ruff, pytest, fastapi), AWS (DynamoDB, EC2, Lambda, RDS, Redshift, S3, SQS, Bedrock, IAM), , ArgoCD, Kubernetes, Snowflake, Jenkins, ELK Stack

**Skills:** Machine Learning, LLMOps / MLOps, Test Driven Development, DevOps, Data Engineering, Architecture Design

Languages: German (Native), Russian (Native), English (C2), Italian (B1), Spanish (B1)

### **Education**

Eberhard Karls University of Tübingen M.Sc. Data Science (NC: 1.7)
University of Bayreuth
B.A. Economics

Tübingen, Germany
Oct. 2019 - Oct. 2022
Bayreuth, Germany
Oct. 2014 - Oct. 2018