

MORITZ WILKSCH

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EDUCATION

University of Potsdam

10/2019 - Present

- Master of Science Business Informatics and Digital Transformation, specializing in Data Science and Machine Learning
- Relevant coursework: Data Science, Machine Learning I & II, Deep Learning, Experiment Design, Big Data Systems, Computational Statistics, Advanced Research Methods, Social Media & Business Analytics research project

Duke University

07/2021 - 11/2021

- Master in Interdisciplinary Data Science, visiting graduate student (semester GPA: 4.0)
- Relevant coursework: Statistical modeling, Data Engineering, Natural Language Processing

University of Potsdam

10/2016 - 10/2019

- Bachelor of Science Business Informatics (Final grade: 1.4, GPA: 3.96)

PROFESSIONAL EXPERIENCE

Open Source Development

02/2022 - Present

- Contributed to *polars*, a fast data frame library for Rust and Python (<https://www.pola.rs>)
- Creator and maintainer of *pyFin-sentiment*, an NLP library for financial sentiment analysis in python

Freelance Work

10/2019 - Present

- Data-driven consulting project at a small local bistro
- Restructured menu, staffing schedule, and kitchen based on transactions data collected from the cash register

Internship

09/2018

- At Consilio GmbH in Munich (SAP-Consultant)
- Organized user stories and modeled business processes for a project with a DAX30 customer

Teaching Assistant

10/2017 - 07/2021

- At the University of Potsdam Institute for Computational Science
- Teaching groups of 40-70 students in “Fundamentals of Programming” and “Practical Programming”

Private Tutor

05/2016 - 07/2021

- At the tutoring service GiRA, for subjects math, computer science, and economics

SKILLS AND LANGUAGES

Technical Skills

- Extensive knowledge in the Python stack for **data processing** (Pandas, NumPy, Polars, SpaCy), **machine learning** (Scikit-Learn, Keras, PyTorch, XGBoost, LightGBM, HuggingFace), **statistics** (SciPy, PyMC3), **data visualization** (Matplotlib, Seaborn, GeoPandas), **orchestration & distributed computing** (Prefect, Ray, Dask), **web scraping**, and development of **microservices** (FastAPI, Flask)
- Good knowledge in SQL, PostgreSQL, MongoDB, DynamoDB, and R
- Basic knowledge in Spark, Neo4j, Elasticsearch, Java, and C
- Experience with Git and Docker, applying CI/CD best practices, and using IaaS and PaaS services on AWS and GCP

Languages

- Fluent in German (native speaker) and English (Level C1, TOEFL: 117), basic knowledge of French

ACHIEVEMENTS

Publication: The Predictive Power of Social Media Sentiment for Short-Term Stock Movements

02/2022

- Conference contribution published at “Internationale Tagung Wirtschaftsinformatik” (WI22)
- Built and compared social sentiment machine learning models to forecast day-ahead stock returns

AWS Certified Machine Learning Specialist

12/2021

- Demonstrated proficiency in building and deploying end-to-end machine learning projects on the AWS cloud

“Deutschlandstipendium” Scholarship

2018 - 2022

- Scholarship for high-achieving and socially committed students, sponsored by Volkswagen AG


Potsdam, May 23, 2022