



# AARON SPRING

aaron.spring@posteo.de | +49 1590 1975 109 | Hamburg  

“Experienced Data Scientist & AI Engineer with 4+ years delivering production ML/LLM systems at scale. Strong background in geospatial data engineering and science. Product-minded communicator driving full ML lifecycle impact from data prototypes to production deployment.”

## Work Experience

- 06/2026 – Geospatial Data Engineer and AI engineer, remote, freelance
- Own AWS pipeline of analysis-ready cloud-optimised (ARCO) daily updating ERA5 data cube (1PB+20GB/day) for earthmover marketplace (WIP)
- 03/2025 – 03/2026 Data Scientist (AI Engineer) at XING, New Work SE, Hamburg
- Developed end-to-end LLM-power recruiting agent from concept to production with RAG retrieval, reranking, prompting, tracing and guardrails
  - Reducing recruiter review load by narrowing 20M profiles to 200 pre-screened, then 10 interested applicants per posting via personalised outreach
- 01/2023 – 02/2025 Data Scientist (Machine Learning Engineer) at XING Marketing Solutions
- Upgraded ad CTR prediction from logistic regression to deep neural network as calibrated recommender system delivering 2% CTR and 2% RPI uplift
  - Feature engineering for personalisation of CTR prediction & A/B Testing
  - Developed LLM-powered ad copy improvement archiving 10% adoption within three months improving CTR by 15%
- 05/2021 – 01/2023 PostDoc at Max-Planck-Institute for Meteorology, Hamburg
- Disentangled COVID-19 response from variability in atmospheric CO<sub>2</sub>
- 04/2021 – 02/2022 Data Engineer at World Meteorological Organization, remote freelance, part-time
- Hosted competition <https://s2s-ai-challenge.github.io/> improving subseasonal weather predictions with Machine Learning with 50 participants
  - Architected data pipeline on renkulab.io for 5TB+ forecast data
- 03/2018 – 04/2021 PhD Candidate at Max-Planck-Institute for Meteorology, Hamburg
- Orchestrated Earth-System-Model simulations, analysed 40TB+ data cube
  - Established probabilistic & deterministic forecasting skill leading climpred
  - Published three peer-reviewed first-author papers
- 10/2015 – 12/2015 Student Consultant in Energy & Utilities, Capgemini Consulting GmbH
- Created business case for laying in of a coal utility of an energy supplier
  - Supported OTC-REMIT reporting for a large energy trader
- 09/2011 – 08/2015 Member of student organisation AIESEC:
- Led 45-member international student organisation local chapter with 20.000€ budget enabling 40 student internships in one year
  - Managed 6-member leadership teams in Heidelberg (2x 1-year terms)
  - Quality management in Colombia, English teacher in Azerbaijan (2x2 months)

## Education

- 03/2018 – 04/2021 Dr. rer. Nat. Max-Planck-Institute for Meteorology, Hamburg, (Grade: 1.1)
- 09/2014 – 08/2017 MSc. Physics, Ruprecht-Karls-Universität, Heidelberg (Grade: 1.3)
- 09/2010 – 02/2014 BSc. Physics, Ruprecht-Karls-Universität, Heidelberg (Grade: 1.8)

## Skills

Programming languages:python, SQL, scala, bash

Data Science: pandas, tensorflow, pytorch, sklearn, mlflow, metaflow, snowflake, spark, airflow

DevOps: CI/CD, TDD, EDD, GitHub, git, docker, fastAPI, REST, argo, AWS

GeoOps: xarray, dask, numpy, geopandas, icechunk, zarr, netcdf, grib, parquet, shapefiles

LLMOps: langchain, qdrant, langfuse, sentence-transformers, pydantic, skills/MCP

Languages: German (native), English (C1), French (B1)