SÁNDOR DARÓCZI

GitHub
https://github.com/sandordaroczi/

Personal Website
sandordaroczi.github.io

ABOUT ME

Data Scientist and Software Developer with strong mathematical foundation, combining expertise in ML model development with robust software engineering practices. Experienced in translating complex requirements into scalable solutions, from data analysis to production deployment. Passionate about leveraging machine learning techniques to drive measurable business outcomes through predictive modeling, NLP, and computer vision applications.

EDUCATION

Technical University of Munich — **Oct 2021 - Mar 2025**
MSc Mathematics in Operations Research

- **Focus Areas:** Machine Learning, Deep Learning, Statistics, Optimization
- **Achievements:** DAAD Master's scholarship, Exchange semester in Taiwan
- **Coursework:** Advanced ML, Data Innovation Lab, Nonlinear Optimization
- **GPA:** 1.2 (German system)

Eötvös Loránd University — **Sep 2018 - Jun 2021**
BSc Mathematics

- **Focus Areas:** Graph Theory, Statistics, Algorithms, Theoretical Mathematics
- **GPA:** 1.0 (4.96/5.00 in the Hungarian system)

WORK EXPERIENCE

Master Thesis in Machine Learning — **Sep 2024 - Present**
Pruna AI & Technical University of Munich

- Developing evaluation frameworks to measure the reliability of highly compressed language models
- Investigating the impact of quantization and pruning on LLM performance across various NLP tasks

Working Student in AI — **Feb 2024 - Present**
Rohde & Schwarz GmbH & Co. KG.

- Designed and implemented a state-of-the-art Convolutional Neural Network (CNN) in PyTorch for an image generation task in Spectrum Monitoring

Working Student in Data Science — **Oct 2022 - Mar 2023**
Lidl Stiftung & Co. KG

- Implemented ML models (e.g., gradient boosting, LSTM, bayesian neural networks) using Python, Pyspark and Databricks for retail analytics, optimizing business processes and delivering measurable financial value through demand forecasting and price estimation across 11,900+ stores across 30+ countries

Data Science Intern — **Apr 2022 - Sep 2022**
Spryfox GmbH

- Developed, maintained, and validated a health risk prediction model using scikit-learn and advanced machine learning, improving accuracy by 5%

HOBBIES

- **Sports:** Running, Boxing, Swimming
- **Languages:** Currently learning Mandarin and Spanish
- **Music:** Playing the violin and the piano

RELEVANT SKILLS

Programming
Python (advanced) • SQL • R • Java • C++

Data Analysis
Pandas • Numpy • Tableau • Matplotlib

Machine Learning / AI
PyTorch • Spark • scikit-learn • Transformers • HuggingFace • Model Compression

Cloud & DevOps
AWS • Docker • MLflow • CI/CD

Project Methodologies
Agile/Scrum • Stakeholder Management • Technical Presentations

Languages
English (fluent), German (fluent), Hungarian (native), Mandarin (intermediate)

PROFESSIONAL DEVELOPMENT

Private Math Tutor (2018 - Present)

- Providing tutoring to university and high school students in Mathematics

Former Exchange Student (2023 - 2024)

- Studied Computer Science in Taiwan and completed a Chinese language course (HSK 2)