GitHub
https://github.com/sandordaroczi/

Personal Website
sandordaroczi.github.io

SÁNDOR
DARÓCZI

ABOUT ME

Aspiring Data Scientist/Data Engineer with a strong foundation in mathematics and a diverse portfolio of experience in developing models for Predictive Modeling, Natural Language Processing, and Large Language Models. Passionate about applying cutting-edge Machine Learning techniques to solve complex problems and committed to pushing the boundaries of innovation in AI-driven solutions for real-world challenges.

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

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 Machine Learning   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 and evaluated multiple ML models (e.g., gradient boosting regression, neural networks) for large-scale retail data analytics including demand forecasting and price estimation
- Developed a robust uncertainty estimation framework to enhance predictive analytics, scaling for over 11,900 Lidl 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%

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)

TECHNICAL SKILLS

Programming Languages
- Python (advanced), SQL, R, Java, C++

Data Analysis and Visualization
- Pandas, Numpy, Tableau, Matplotlib

Machine Learning / AI
- PyTorch, scikit-learn, Transformers, HuggingFace, Quantization

Cloud & DevOps
- AWS, Terraform, Docker, MLflow, CI/CD

Data Engineering
- ETL pipelines, MongoDB, data modeling

Other
- RESTful APIs, HTML

LANGUAGES

- Hungarian - native
- English - fluent
- German - fluent
- Mandarin - intermediate

HOBBIES

- Long-Distance Running
- Learning languages (German, French, Mandarin)
- Playing the violin (10 years), the piano (4 years), and the bass guitar (1 year)

Munich, Germany, 16.10.2024   Sándor Daróczi