



SÁNDOR DARÓCZI

ABOUT ME

Mathematics Master's student from TU Munich, combining solid technical expertise with strong analytical and problem solving skills. Proven experience in Python-based ML solutions across several industries - from CNN models at Rohde & Schwarz to uncertainty quantification at Lidl. Mathematical background combined with first practical experience in Java and C++ development. Experienced in agile methods and committed to making a difference with clean, efficient code.

EDUCATION

Technical University of Munich

Oct 2021 - Mar 2025

MSc Mathematics

- **Focus Areas:** Machine Learning, Stochastic Analysis, Statistics, Optimization
- **Achievements:** DAAD scholarship (top 11 students), Exchange Semester (Taiwan)
- **Projects:** Mixed-integer optimization for train routing (**Siemens**), Uncertainty quantification in retail analytics (**Lidl & TUM**)
- **GPA: 1.2** (German system)

Eötvös Loránd University

Sep 2018 - Jun 2021

BSc Mathematics

- **Focus Areas:** Graph Theory, Statistics, Probability Theory
- **Projects:** Research grant in discrete mathematics (dominating graphs), Graph theory summer school
- **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 robust evaluation frameworks for LLM reliability assessment
- Implementing quantization and pruning techniques for production-ready language models
- Building automated testing pipelines to validate model quality across different compression settings

Working Student in AI

Feb 2024 - Present

Rohde & Schwarz GmbH & Co. KG.

- Implemented and deployed a state-of-the-art Convolutional Neural Network (CNN) model in PyTorch for an image generation task in Air Traffic Control

Working Student in Data Science

Oct 2022 - Mar 2023

Lidl Stiftung & Co. KG

- Led implementation of uncertainty quantification methods for ML models using bayesian approaches and LSTM-based time series models in Python
- Developed evaluation metrics for applications in demand forecasting and prices estimation as a team of 3 highly motivated students

Data Science Intern

Apr 2022 - Sep 2022

Spryfox GmbH

- Developed, maintained, and validated an end-to-end health risk prediction model using LightGBM and XGBoost models, improving accuracy by 5%

HOBBIES

- **Sports** (Running, Gym, Swimming), **Languages** (Mandarin, French), **Music** (Violin, Piano, Bass Guitar)

GitHub

<https://github.com/sandordaroczi/>

Personal Website

sandordaroczi.github.io

SKILLS & EXPERTISE

Machine Learning Development

- **Languages:** Python (advanced), R
- **Frameworks:** PyTorch, scikit-learn, transformers, LLMs
- **ML Tools:** MLflow, Tableau

Software Engineering

- **Languages:** Java, C++
- **Version Control:** Git
- **Infrastructure:** AWS, Terraform, CI/CD
- **Development Tools:** Confluence, Jira

Project Management

- **Methodologies:** Scrum, Kanban
- Stakeholder Management
- Presentations to Diverse Audiences
- Cross-functional Team Collaboration

PERSONAL PROJECTS

Game Development Projects (2018-2020)

- Developed 5 complete games in Java (Processing), implementing core gameplay mechanics and UI
- Utilized OOP principles, design patterns, and Git

Competitive Programming in C++

- Solved 100+ algorithmic problems on CodeForces and CodeChef
- Improved algorithmic problem-solving skills and efficient coding