



Mike Laszkiewicz

Mathematician (M. Sc.)

- PhD Student, Machine Learning
- 17.02.1996 in Essen
- +49 176 47134274
- laszkiewicz.ml@gmail.com
- mikelasz.github.io/
- github.com/mikelasz
- mike-laszkiewicz-a55666248/

Skills



Summary

- ▶ Doctoral student working in the field of deep learning. Preparing to defend my doctoral thesis by August 2024.
- ▶ Several years of machine learning experience and keenness in deploying state-of-the-art models, including foundation and diffusion models.
- ▶ Eager to apply my knowledge of deep generative models to tackle exciting problems in industrial research.

Education

Doctorate | Computer Science

10/2019 - Today

Chair of Machine Learning, Ruhr University, Bochum, Germany

Researching deep generative models, including generative adversarial networks and diffusion models. I spent two months in the medical data science lab at ETH Zurich. My research articles have been published at top-tier machine learning conferences, including ICML, ACM FAccT, and AISTATS. In my current research projects, I leverage modern foundation models for visual anomaly detection and study the attribution of AI-generated audio.

Master of Science | Mathematics | GPA: 1.0 Minor in Economics

10/2017 - 10/2019

Ruhr University, Bochum, Germany

Focus on applied mathematics, probability theory, and statistics. My Master's thesis, "*Graphical Models in Theory and Practice*" (grade: 1.0), was awarded by the *Verein zur Förderung der Mathematik an der Ruhr-Universität e.V.*

Bachelor of Science | Mathematics | GPA: 0.9 Minor in Economics

10/2014 - 10/2017

Ruhr University, Bochum, Germany

My Bachelor's thesis, "*Analysis of the Efficiency of Quasi-Monte-Carlo Algorithms [...]*" (translated, grade: 0.7), was awarded by the *Verein zur Förderung der Mathematik an der Ruhr-Universität e.V.*

Abitur | GPA: 1.9

08/2007 - 08/2014

Gymnasium am Stoppenberg, Essen, Germany

Majors: Mathematics and Physics.

Work Experience

Research/Student assistant

10/2015 - Today

Ruhr University, Bochum, Germany

Teaching courses, ranging from courses in the fields of mathematics to statistics and computer science.

Student assistant

04/2018 - 10/2019

Ruhr University, Bochum, Germany

Implementing a novel medical image reconstruction method using Python and providing statistical consulting for empirical theses.

Internship in an actuarial consultancy

02/2017 - 05/2017

Meyerhole Siems Kohlruss, Cologne, Germany

Data maintenance and validation using the in-house database system.

Certificates and Awards

04/2024

AWS Certified Cloud Practitioner (CLF-C02)

Demonstrates foundational understanding of AWS Cloud, services, terminology, and the ability to identify AWS services for common use cases.

04/2024

SQL Bootcamp

Udemy course to refresh my SQL skills. Covers basic features, queries, and the connection to a database via PHP.

08/2022

Masters thesis award

Awarded by the Verein zur Förderung der Mathematik an der Ruhr-Universität e.V.

12/2018

Bachelor thesis award

Awarded by the Verein zur Förderung der Mathematik an der Ruhr-Universität e.V

Languages

German



English



Polish



French



Hobbies

- ▶ Bouldering
- ▶ Lacrosse
(playing, refereeing, coaching)
- ▶ Board games
- ▶ Watercolor painting

Latest Academic Articles

- Damm, S. & Laszkiewicz, M. & Lederer, J. & Fischer, A. (2024). "AnomalyDINO: Boosting Patch-based Few-shot Anomaly Detection with DINOv2". *Under review*.
- Laszkiewicz, M. & Ricker, J. & Lederer, J. & Fischer, A. (2024). "Single-Model Attribution of Generative Models Through Final-Layer Inversion". *41st International Conference on Machine Learning*, Vienna, July 21 - 27, 2024.
- Laszkiewicz, M. & Daunhauer, I. & Vogt, J.E. & Fischer, A. & Lederer, J. (2024). "Benchmarking the Fairness of Image Upsampling Methods". *ACM Conference on Fairness, Accountability, and Transparency*, Rio de Janeiro, June 03 - 06, 2024.
- Laszkiewicz, M. & Lederer, J. & Fischer, A. (2022). "Marginal Tail-Adaptive Normalizing Flows". *39th International Conference on Machine Learning*, Baltimore, July 12 - 17, 2022.

Programming Projects

Yo Flunk!

01/2020 - 12/2022

github.com/MikeLasz/yo_flunk

Android application for tracking, summarizing, and visualizing flunky ball matches. A Firebase realtime database is deployed to synchronize data across multiple devices. Programmed in Android Studio, Java.

Deepgaldx

03/2022 - 12/2022

github.com/MikeLasz/deepgaldx

Science-Slam project about style-transfer of images using CycleGAN implemented in Python. Targeted toward a non-technical audience.

Robustness of RDF2Vec

04/2020 - 10/2020

github.com/MikeLasz/robustness_rdf2vec

Analysis of the robustness of the knowledge graph embeddings of RDF2Vec. The database is queried using SPARQL and the analysis is conducted in Python.

Voluntary Activities

Lacrosse Coaching

10/2022 - 07/2023

Weekly coaching at the university lacrosse course.

Shotclocks with mobile connectivity

01/2022 - 06/2022

Built for the lacrosse club, used at the *Allgemeine Deutsche Hochschulmeisterschaft*.

Nextcloud server for the local sports club

01/2020 - Today

File hosting service and management tool deployed on a remote Linux server with approximately 100 active users.

Academic self-governance

10/2019 - 03/2024

Preparation and analysis of the course evaluations of the mathematics faculty.