technische universität dortmund

LAMARR INSTITUTE FOR MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE

With more than 6,200 employees in research, teaching and administration and its unique profile, TU Dortmund University shapes prospects for the future: The cooperation between engineering and natural sciences as well as social and cultural studies promotes both technological innovations and progress in knowledge and methodology. And it is not only the more than 34,600 students who benefit from that.

Multiple PhD Positions on (Auto-)ML (TVL-E13, 100%)

The newly established research labs, **AutoML and Optimization** (Matthias Feurer) and **Machine Learning and Artificial Intelligence** (Katharina Eggensperger), are looking for highly motivated candidates for several PhD Positions on (Auto-)ML. (TVL-E13, 100%, i.e., the PhD is fully funded; initial contract will run 3 up to years; earliest start October 1st, 2025).

What we offer? The Ruhr area, one of Europe's largest metropolitan regions, offers attractive career opportunities for excellent scientists and scholars from around the world. As a successful applicant, you will conduct research in a high-profile research environment at the **Lamarr institute at TU Dortmund**. You will have ample opportunity to collaborate, publish and present your scientific results at top-tier international venues, and contribute to teaching offers. We also highly support research internships and lab visits to shape your scientific network.

The Lamarr Institute (https://lamarr-institute.org/) is shaping a new generation of Artificial Intelligence (AI) that is high performing, sustainable, trustworthy and secure to contribute to solving fundamental challenges in business and society. As one of Germany's major AI competence centers, the Lamarr Institute stands for value-based, internationally competitive and application-oriented excellent research and is engaged in science, education and technology transfer on a regional, national as well as international level.
The research institute is constituted by the TU Dortmund University, the Rheinische Friedrich-Wilhelms-Universität Bonn and the Fraunhofer Institutes for Intelligent Analysis and Information Systems IAIS in Sankt Augustin and for Material Flow and Logistics IML in Dortmund. As outlined in the federal government's AI strategy, the Lamarr Institute receives permanent funding from the German Federal Ministry of Education and Research (BMBF) and the state of North Rhine-Westphalia.

Research Focus. Applying machine learning requires expert decisions and resources. Our research aims to lower this barrier to robustly and efficiently apply ML and research interests cover the science of empirical research and benchmarking, hyperparameter optimization, and the current role of AutoML.
→Check our websites/google scholar profiles for recent projects and publications.
→ Please do reach out to us for more information or in case of any questions.

Matthias Feurer's team will focus on AutoML systems, benchmarking, and prompt optimization for large language models.
matthias.feurer@cs.tu-dortmund.de
www.matthiasfeurer.de | Google Scholar

Katharina Eggensperger's team will work on tabular machine learning, benchmarking, Bayesian optimization, and AutoML for scientific applications.
katharina.eggensperger@cs.tu-dortmund.de
automl4science.de | Google Scholar

What we expect?

- An excellent MSc degree (or about to finish) in AI, ML, DL, DS, CS, statistics, or a related discipline
- Solid knowledge of (and experience with) ML and DL methods
- Python knowledge with good working knowledge in developing/applying/evaluating ML & DL methods
- Curiosity and motivation to pursue cutting-edge research

Knowledge in one or more of the following is beneficial: AutoML | Hyperparameter optimization | Bayesian Optimization | Black-Box optimization | Large-scale evaluations | Deep Learning with tabular data | Benchmarking | Explainability | Application of large, pre-trained models | Meta-Science | Meta-Learning

We promote diversity and equal opportunities. Convince us with your personality and expertise. Applications from women will be given preferential treatment in accordance with the statutory regulations. It is pointed out that the application of suitable severely disabled persons is desired.

Applications may be sent until 03.09.2025 stating reference number w62-25.

To apply, please send the following documents to katharina.eggensperger@cs.tu-dortmund.de **and** matthias.feurer@cs.tu-dortmund.de:

- Preferred **starting date** (including earliest and latest possible date)
- **CV & Transcript of records**
- **Research Statement** (max two pages, english), including your research background an

WELTOFFENE HOCHSCHULEN GEGEN FREMDENFEINDLICHKEIT

FAMILIE IN DER HOCHSCHULE