

TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the **Faculty of Computer Science, Institute of Artificial Intelligence**, the **Chair of Machine Learning for Computer Vision** offers a position as

**Research Associate / PhD Student (m/f/x)**  
**“Machine Learning and Image Analysis”**

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting at the **earliest possible date**. The position is limited to three years with the option of extension. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG). The position aims at obtaining further academic qualification (usually PhD). Balancing family and career is an important issue. The position is generally suitable for candidates seeking part-time employment. Please indicate the request in your application.

**Tasks:**

- curiosity-driven basic research of fundamental mathematical optimization problems in the fields of machine learning and image analysis
- design and analysis of algorithms for solving these problems, exactly or approximately
- implementation, empirical analysis and comparison of these algorithms with respect to real data
- publication of findings and insights in internationally leading conferences and journals
- contributions to teaching, administration and acquisition of research funding.

**Requirements:**

- very good university degree in mathematics or computer science or a related discipline
- comprehensive education in mathematics, especially in discrete mathematics and one area of mathematical optimization (e.g. discrete optimization, convex optimization)
- curiosity and strong interest in rigorous mathematical methods
- very good programming skills in C or C++
- very good scientific writing skills in English.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Please submit your detailed application with the usual documents by **March 18, 2024** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies),

preferably via the TUD SecureMail Portal <https://securemail.tu-dresden.de> by sending it as a single pdf file to [mlcv@tu-dresden.de](mailto:mlcv@tu-dresden.de) or to: **TU Dresden, Fakultät Informatik, Institut für Künstliche Intelligenz, Professur für Maschinelles Lernen für Computer Vision, Herrn Prof. Dr. rer. nat. Björn Andres, Helmholtzstr. 10, 01069 Dresden, Germany.** Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

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**Reference to data protection:** Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: <https://tu-dresden.de/karriere/datenschutzhinweis>.