

The Munich Data Science Institute (MDSI) at the Technical University of Munich (TUM) invites applications for

MDSI Doctoral Fellowships

This prestigious fellowship program promotes innovative approaches to addressing ambitious challenges in data science, machine learning, and artificial intelligence. The funded doctoral fellows across different disciplines will be integrated into a thriving and dynamic research atmosphere. They will participate in the specially tailored MDSI training program that helps prepare them for their research in this diverse field. Furthermore, upon availability, they can use MDSI's facilities and actively participate in MDSI events and other formats. Collaboration and interaction with fellows and faculty from other research areas is highly supported.

In this call for applications, we aim to recruit excellent new fellows from:

All areas of data science, machine learning, and artificial intelligence, their mathematical foundations, and their application in the various scientific fields represented at TUM.

Application

Candidates must choose **an [MDSI Core Member](#) or a TUM-based [ELLIS member](#)** as their doctoral supervisor. Two reference letters must be arranged. One of these reference letters may be provided by the doctoral supervisor. The applicants ensure that both reference letters arrive at MDSI one week after the call's deadline at the latest. Each supervisor can only support one candidate per call.

Doctoral candidates must compose a **motivation letter** that outlines their interest in the doctoral thesis and connection to the above research areas. In this context, it should reflect on past achievements and the applicant's academic track record. Here, they also introduce their connection to MDSI (and -if applicable- ELLIS) and communicate their ideas for involvement in existing activities or suggest new ones.

Furthermore, applicants must compose a brief overview of their **research goals** describing their thesis topic. In the context of their research, they also illustrate their integration into their research group at TUM. We encourage them to outline connections to other fitting research groups with which they would like to establish contacts (at TUM and elsewhere). The applicants should describe how they envision interacting with them during their doctorate (e.g., via regular meetings or MDSI activities like the [doctoral seminar](#) as part of the [MDSI doctoral training program](#)). The doctoral candidates coordinate their research goals with their (future) supervisor.

Please note that the reviewers evaluating the applications are not from the same field of research as the applicants. Thus, the depth of the scientific rationale should be adapted accordingly.

Funding

This program provides funding for three years (TVL E13 contract) to pursue a doctoral degree for the two best applicants. Furthermore, in this call for applications, the third-best application is awarded 50% co-funding for their doctoral position (also for three years).

To be eligible for the latter, the supervisor must submit a signed support letter provided with this call for applications. The supervisor agrees to provide the second half of the applicant's salary via this support letter. The co-funded position is supplied with 50% of the doctoral researcher's total

salary, regardless of the actual number of contractual work hours (e.g. a 75% E13 position is co-funded with 37.5% of an E13 salary).

Please note that submitting a support letter does not reduce the applicant's chances of receiving one of the two fully funded positions. The selection committee deciding on the final ranking of the applications will be agnostic of who has submitted a support letter and who has not. When the ranking of the applications has been fixed, the first two applicants will receive the full funding. The next best application with a support letter will receive the co-funded position, given that the application meets the overall quality criteria. Applicants newly arriving at TUM must start their fellowship within six months of their notification of acceptance. Doctoral researchers already at TUM moving into this program cannot have started their thesis¹ before 1 November 2024.

The successful candidates will integrate their participation in the MDSI doctoral training program into their [TUM-GS supervision agreement](#). Optionally, they may include additional elements of the MDSI program as well. This refers especially to activities listed in the research goals overview or the motivation letter.

Hosts can support one fellow at a time only. Please check the [MDSI web page](#) to identify hosts that cannot support further fellows.

Eligibility:

- Excellent master's degree in computer science, mathematics, engineering, natural sciences, or data science-related social disciplines.
- General admission requirements for a doctorate at TUM are met as defined on the [TUM-GS web pages](#).
- Thesis work at TUM cannot have started before 1 November 2024.

Please provide the following documents:

- CV including a list of publications and awards (if applicable).
- Scanned transcripts of certificates (bachelor's degree, master's degree², latest transcript of records for master's degree, other degrees, or awards).
- Motivation letter as described above (~700 words).
- Overview of research goals as described above (~700 words plus references).
- Names and addresses of two persons who can provide recommendation letters. One of these might come from the supervisor. Please inform the reference persons to send the recommendation letters directly to MDSI at the latest by 4 May 2025 (application@mdsi.tum.de, e-mail subject: MDSI Fellowship LoR - <your name>).
- Optionally: [Support letter](#) of the chair confirming the availability of the second half of the co-funding (see attached). The hosting chair should send the support letter to MDSI at the latest by 4 May 2025 (application@mdsi.tum.de, e-mail subject: LoS Linde PhD - <your name>).

Please send your application as one PDF file to the following e-mail address: application@mdsi.tum.de (e-mail subject: MDSI Fellowship App - <your name>); the **application deadline is 27 April 2025**. Notification about the results is planned for July 2025.

¹ Starting date of first employment contract related to thesis is decisive.

² In case the master's degree is still ongoing, submitting the latest transcript of records is sufficient. However, the master's degree certificate must be provided before the funding starts.

Successful applicants will be hired per the current German collective pay agreement up to TV-L E13. The fellowship period will have a maximum duration of three years. Applications from disabled persons with essentially the same qualifications will be given preference. TUM strives to raise the proportion of women in its workforce and explicitly encourages applications from qualified women.

You transmit personal data as part of your application for a position at the Technical University of Munich (TUM). Please note our data protection information per Art. 13 General Data Protection Regulation (GDPR) for collecting and processing personal data in the context of your application. By submitting your application, you confirm that you have taken note of TUM's data protection information (https://portal.mytum.de/kompass/datenschutz/Einstellung_Beschaeftigung/#English).