

Call for project proposals: MDSI Seed-Funds

Introduction

Data science comprises data generation, storage, processing, and analysis. Its analytical part is closely related to artificial intelligence and machine learning and uses methods and tools from mathematics, statistics, and informatics to extract information and generate knowledge from all sorts of data such as text data, images, natural language, sensor data, measurements, or simulation data. In this call for proposals, MDSI seeks to support projects that follow this general theme.

Supported projects

The MDSI Seed-Funds shall provide a kick-start to projects, which are currently in an installment / starting phase. The aim of the seed funding is to boost such projects by stimulating the identification of common research topics, producing initial methods for subsequent research or other preparatory work. Ideally, the MDSI Seed-Fund projects result in the composition of first publications or the acquisition of external funding. Projects incorporating machine learning or artificial intelligence aspects in an interdisciplinary setting are highly appreciated.

Please note: Projects from the last MDSI Seed-Fund call are welcome to apply for a funding extension.

Funding

Successful projects will receive funds for up to two (post)doctoral researchers for up to six months duration. The funded researchers must have an employment contract (up to E13 100%) with TUM via the individual chairs / groups at the start of the project. The MDSI will cover their funding for the duration of the funding period.

Please note: We particularly welcome project proposals that incorporate Ukrainian researchers who have recently joined TUM.

Requirements

- Proposals must comprise at least two PIs who hold a doctoral degree and have the right to supervise doctoral researchers (professors, PDs, TUM Junior Fellows).
- Individual PIs can participate in up to two proposals simultaneously in this call.
- A short, written report about the outcomes of the project must be provided six months after the MDSI funding has run out, at the latest. In addition, the team must produce a visible output in the form of e.g., a poster, or ideally a publication or a proposal for external funding.
- To monitor the long-term success of the program, one year after the funding has ended, a further update on the outcomes must be provided.
- Projects applying for an extension must elaborate on their achievements from the initial funding period and explain why an extension is required in the proposal. In addition, they must present the report for the first funding period together with the new application.
- Funded personnel are encouraged to participate in other MDSI activities and shall present their project outcomes in the MDSI Interdisciplinary Exchange series.

Proposal structure

Proposals must not exceed a total length of two pages (plus an optional, third page, with figures including captions). They must be written in **Arial, 11pt, with a line spacing of 1.0. Pages must have borders of 2cm.** The proposal must exhibit the following outline:

1. Title (and acronym)
2. Research team (with team member name, affiliation, email, and web page):
 - the two PIs,
 - the personnel, who are to be funded (including funding duration and details of current employment contract: employer, pay grade),
 - other collaborators
3. Abstract (max. 350 words)
4. Project description (including state-of-the-art, goals, idea...)
5. Fit to MDSI (how does the proposed project fit into the MDSI scheme conceptually, structurally, in terms of collaboration...)
 - If applying for an extension, explain why additional funding is required
6. Future perspectives (description of follow-up work after seed phase, list of funds that are / will be applied for)
7. References (max 10)

Please note: Proposals not adhering to these formal criteria will be excluded from the evaluation process.

Reviewing process

All proposals will be peer-reviewed, composed by a review team of MDSI members. In their evaluation, they will consider the following aspects:

- Interdisciplinarity (ideally, PIs from foundations fields team up with those from domain areas)
- Originality of the research (new, creative, explorative)
- Feasibility (demonstration that the proposed goals can be achieved in the given amount of time)
- Impact (in particular in context of the MDSI environment, fit to MDSI)
- Subsidiarity (what other funds have been / will be applied for to support the research after the seed period)

MDSI will confirm the receipt of the proposals within one week after the closing of the call. All applicants will be notified of the outcome of the reviewing process (including statements by the reviewers).

Public relations

Funded projects will be displayed on the MDSI web site. They shall give credit to MDSI in all their scientific activities (including papers, conference contributions, etc.). Authors are requested to list MDSI as an affiliation.

Disclaimer

All funds are administered through MDSI and granted upon request and availability of funds. MDSI reserves the right to alter funding schemes at any time.

Timeline

Deadline for proposal submission: Sunday, 17 July, 2022

Earliest project start: Thursday, 01 September, 2022

Funding duration: 6 months maximum

Contact

Proposals must be sent in one pdf-file to: proposal@mdsi.tum.de

If you have any questions, please contact Dr. Marco Barden, marco.barden@tum.de