Universiteit Utrecht   *Applied Data Science*

Grants for research projects in the Special Interest Groups of the focus area Applied Data Science

Version 28 March 2024

1. Focus area Applied Data Science, mission, and Special Interest Groups
The Special Interest Groups (SIGs) are an important tool to achieve the objectives of the Applied Data Science focus area. The objectives are:
1. Introducing and applying data science techniques in research areas where they are not yet applied.
2. Accelerating the development of data science techniques by working in an interdisciplinary way.
3. Forming a community of researchers active in the field of data science.
4. Sharing data science knowledge by making existing education in data science more accessible and developing new education.
5. Putting Data Science on the map at Utrecht University, nationally and internationally, by raising its internal profile and entering external partnerships with foreign universities and with the profit and non-profit sector.

2. Purpose of the grant and themes
The purpose of the grant is to financially support initiatives that match the objectives of the focus area. Examples are:
o Interfaculty research projects aimed at the application or development of data science techniques.
o Seed money for the preparation of interdisciplinary (interfaculty) grant applications, for a pilot study to prepare a grant application.
o Consultation costs when a researcher from one faculty helps a researcher from another faculty with the application/development of data science techniques.

3. Who can apply?
* Tenured researchers (assistant professor, associate professor, professor at the UU or UMCU) participating in a Special Interest Group (SIG) of the Applied Data Science (ADS) focus area.
* Proposals should involve researchers from at least two different faculties and have received the approval of the organisation team from the SIG to which the applicants belong. The list of faculties can be found here:
  https://www.uu.nl/en/organisation/governance-and-organisation/faculties
  All applicants from the UMC Utrecht and the Prinses Maxima Center will be considered as belonging to the Faculty of Medicine, unless they also possess an affiliation at one of the other faculties.
* In case the number of applications exceeds the funding available, applicants who have received an ADS grant in the same year or the year prior may receive a lower priority if the other calls have sufficient quality.
* *Priority will be given to teams containing applicants that have not previously worked together.*
* Researchers who do not yet have experience with the application of data science techniques and who ask another researcher within the UU / UMCU to assist with the analysis of their data, are encouraged to submit a research proposal.

4. Approval from the organisation team of the SIG
Contact the coordinator of the Special Interest Group in which you are involved. The contact details of all SIGs can be found on the Applied Data Science website (www.uu.nl/ads). The SIG organisation team will assess the proposals for scientific relevance. Therefore, the SIG organisation team pays attention to:
* possible overlap and prioritisation,
* when multiple proposals are offered to the SIG, and
* whether additional expertise can be involved.

5. When research proposals can be submitted
Proposals may be submitted twice a year, by 22 May and by 22 November. In 2024 the first call will have an extended deadline of 22 June.

6. Budget available
€35K is available for the call of 22 June 2024. This makes it possible to fund seven research projects of €5000 each.

7. Complementing the available research budget with Research IT services
In the research proposal submitted to the focus area Applied Data Science, the following additional services can be requested from Research IT:
o Assistance from RDM support, for example in the field of data management, see http://www.uu.nl/rdm. This is free of charge, unless it concerns more than a few hours, then a data manager can be outsourced from the library.
o Computing power at SURFsara, see https://www.uu.nl/en/news/limited-time-free-computing-power-for-researchers.
o Advise for best computing solutions, consultancy.
o For complex data projects, support from a data engineer might be available under certain conditions.

8. What can be requested?
o Salary costs for a student assistant.
o Reimbursement of consultation costs of researchers who help researchers from other faculties.
o Support from Research IT: use of a data manager from the library, data storage, consultancy, possible services from a data engineer under certain conditions.
o Material costs. [*Note: Proposals that ask for material costs will have a lower priority.*]

Funding may not be requested for the buy-out of teaching, salary costs of general staff or administrative support, the purchase of software, hardware, and other equipment, attending courses, attending conferences, travel and other expenses or consultation fees of external organisations.

9. Criteria and terms
The evaluation of the research proposals will be carried out by two or more ambassadors from the Applied Data Science focus area, selected by the Steering Committee based on their expertise in the subject matter of the proposals. Advice is also given by members of the organisation teams of the SIGs and the director of the focus area. When Research IT services are requested, Research IT is involved to assess the feasibility of the proposals.

Proposals must be in line with the objectives of the grant and the Applied Data Science focus area, specifically:
o Introducing and applying data science techniques in research areas where they are not yet applied.
o Accelerating the development of data science techniques by working in an interdisciplinary way.
o Building and sharing data science knowledge in the Utrecht University data science community in a sustainable way.

The results of the project must be completed within 1 year after the grant is awarded and are reported to the steering committee within 1 month after completion. During the project and after completion, the results will be presented and disseminated to the research community of the UU/UMCU to promote knowledge exchange in the field of data science.

Applicants should use the FAIR principles as much as possible when sharing data and should follow the guidelines of Utrecht University. Results of the projects (such as scripts) should be openly available as much as possible.

Proposals will be assessed based on the following criteria:

Relevance to the focus area Applied Data Science
o   The extent to which the project contributes to the objectives of the focus area (see 1.).
o   The interdisciplinary design of the project. Projects that bring together research groups from traditionally separate disciplines are strongly encouraged.

Scientific relevance
o   Scientific quality.
o   Quality and clarity of the written proposal.
o   Possible impact of the results.
o   Feasibility of the project (including the IT component)

Knowledge Utilization
o   The extent to which the results of the project can be used by others. Such as the applicability of the results outside the context of the project, e.g., in other disciplines, research groups at the UU/UMCU and/or at external organisations. Or the way the results of the projects are shared within the UU / UMCU research community.
o   The extent to which any tools developed are open (open source/open access) and make it possible for other researchers to use them.
o   The possibilities for cooperation with external organisations to further develop the project and obtain external funding.

10. Guidelines for the submission of proposals

The proposal contains the following elements:

1. Description of the problem and the deliverables. An explanation of the relevance of the project for the focus area Applied Data Science and data science in general.
2. Affiliation of applicants, description of expertise.
3. Research plan with a description of the approach, use of data files (if applicable) and the deliverables in the short and long term.
4. Possible request for extra resources, such as:
    o   Required computing time at SURFsara.
    o   Support from the RDM (Research Data Management) division, in the form of consultancy or a data manager.
    o   Support by data engineer.
5. Planning and budget.

11. Organisation focus area Applied Data Science

Project organisation focus area Applied Data Science
Director: Peter van der Heijden (P.G.M.vanderHeijden@uu.nl)

Steering Committee focus area Applied Data Science
-   Prof. Rick Grobbee, *chair* (UMCU)
-   Prof. Peter van der Heijden (Social and Behavioural Sciences)
-   Prof. Derek Karssenberg (Geosciences)
-   Prof. Hugo Quené (Humanities)
-   Prof. Arno Siebes (Science)