

DSI Call for research 2022 (תשפ"ב)

The Data Science Institute at Bar-Ilan University

Call publication: May 01, 2022

Submission deadline: June 06, 2022

Objectives

A major activity of the Bar-Ilan Data Science Institute (DSI) is to support top-tier data-science interdisciplinary and collaborative research and to increase the volume and success rate of competitive grant submission by BIU faculty.

In this call the DSI solicits its members to submit research proposals meeting one or more of the following schemes:

- i. Intra-core data science collaboration: Recognizing that research yield can be significantly increased through collaboration between core researchers and by cross-fertilization of ideas and methods, the DSI will support teams of researchers in different fields of core data science.
- ii. Data Science in non-core research: As part of its vision to reach out to all relevant researchers in the university, the DSI will encourage PIs, whose main area of research is not in the core data science fields of study, to incorporate data science methodologies and apply data science methods in their research. Projects must include a significant data science component, and would desirably carry impact and/or insights beyond the individual project scope.
- iii. Collaborative non-core & core research: The DSI supports synergetic collaborative research between core and non-core disciplines (mainly tangential fields) that can significantly enhance both groups and widen the horizons to the involved parties. The non-core researchers will benefit from incorporating data science methodologies in their research, while the core researchers will benefit from exposure to new problems and access to interesting data.
- iv. Collaborative research with the industry and/or the public sector: The Israeli public sector (government, hospitals, health maintenance organizations, National Social Security, etc.) already recognizes the importance of data and its sophisticated analysis. DSI is making headway with several public authorities, and has conducted a joint DS event with the Water Authority, meetings with the Ministries of Education and Law, and more. BIU DSI will support collaborations with the public sector by granting initial "kickstart" funding to BIU researchers (to pave the way for broader funding).
- v. Development of FAIR Datasets: as part of the charter of DSI is to promote the

establishment of, and access to, data that can enhance research in the scientific, public and private sectors. Such data should be FAIR – findable, accessible, interoperable and re-usable.

For the purpose of this call:

- Core data science areas of research include: Machine Learning, Statistical Learning, Deep Learning, Reinforcement Learning. Computer Vision, Image Processing, Speech Processing, and Natural Language Processing. Data Mining and Analysis of Time Series, Networks or other data types.
- Non-Core areas of research include: AI and robotics, cyber security, computational methods in biology, chemistry and medicine, Social Sciences, Law and Humanities including data science applications in these disciplines.

Call Details

Funding scope and duration

In this call the DSI will grant between 1-1.5 Million NIS to proposals with the highest prospects for innovation, impact and future funding. PIs can apply for 80-160K NIS per project. The funds are to be used in the next academic year of TASHPAG (תשפ"ג). This year the deadline for spending the budget and reporting it is strict, as it is the last year of the VATAT Data Science Program.

Eligibility criteria

- Call open to all DSI members
 - By submitting a proposal to this call the BIU PIs on the call accept to be members of the DSI and have their details appear in DSI reports.
- PIs with an active DSI grant in TASHPAG **cannot** apply to this call
- Proposals must meet at least one of the schemes stated in the objectives section above
- PIs who won VATAT's competitive call can submit to this call proposals on completely disjoint topics

Accepted Expenses

Proposals can include any of the following expenses::

- Scholarships
- Research Assistants
- Equipment
- Expenses for developing FAIR datasets
- Technical support or other consulting services
- Travel

- Publication expenses
- Events (up to 20% of total budget requested)
- Administrative and other expenses (up to 5% of total budget requested)

All expenses must take place at BIU.

Submission Guidelines

Applications must be submitted by June 6, 2022, through this following link:

<https://dsi.biu.ac.il/dsi-call-for-research-2022/>

The full application must include the following 4 sections:

- Cover: 1 page
 - Research title;
 - Name of principal investigator; Names of all Co-PIs and their affiliation;
 - Total Budget Requested
 - A short abstract (up to 200 words); research topic or topic number from Appendix
- Research Proposal: 3-4 pages (not including references or appendices).
 - Include: Background, goals, methodology and research plan
 - Specify details of cooperation with industrial company/public sector/other institution, if any, including the role of the partner
 - Research proposals **must be written in English**, Times New Roman 12-point font size, 1.5 line spacing. This page limit does not include references, which can appear in additional pages as needed.
 - **NOTE**: reviewers may not be experts in the field. Proposals should be written accordingly.
- Budget plan: 1 page
 - The planned budget of 80,000-160,000 NIS must be allocated in line with the research and proposed timeframe (Oct 22 - Sep 23).
 - Include:
 - A table describing the breakdown of the requested budget by expense type + short description per item
 - A short budget justification.
 - Clarification of capacity - specify other active PI grants and their involved in them (percent of time)
 - Any existing funding or plans for further funding of this project (e.g. planned or existing grant applications to other funding sources)
 - Preference will given to proposals with a clear plan and confidence in spending the funds in TASHPAG (e.g. a named student or post-doc, detailed equipment request with price quote)
- Supplementary Material:
 - Short CV of all researchers

- (Optional) Any other supplementary material (e.g. support letters)

Process

- Proposals will be judged by a program committee assigned by the DSI.
- Grant winners will be required to provide a final report shortly after the end of TASHPAG (exact dates will be published according to VATAT reporting requirements; notice this is the last year of the VATAT program, so deadlines will be strict).
- Grant winners are required to acknowledge the DSI funding in any publication resulting from the funded work

Timeline

- Call publication: May1, 2022
- Submission deadline: June 06, 2022
- Acceptance Notification: by end of July, 2022
- Funds available: by end of Sep 2022
- Funds to be used: Until Sep 2023 (end of TASHPAG)

For any questions contact: dsi@biu.ac.il