

Scholarship Application form for Doctorate students in Data Science 2022-2023

Aims of the program

- To encourage and help excellent research students in Data Science to seek Ph.D. studies.
- To enable Ph.D. students to invest most of their time in research and studies.
- To promote multi-disciplinary research based on cooperation between two or more DS researchers, which will develop new methods and applications of DS.
- The success of the DSRC depends on the number of publication by the center's researchers. We ask that the recipients of scholarships will report on any new publications.

The scholarships offered:

The scholarship of 96,000 NIS per year is offered for a period of 3 years.

The scholarships are offered under the following conditions:

1. The research is being conducted on the subject of DS and the research question will lead to the development of a new method in DS. The Scientific Committee will consider all proposals that deal directly with data science, including the use of existing methods for researching new problems or new sets of data that have not yet been studied in DS methods (even not as exploratory research).
At the same time, it is important to emphasize that projects whose sole purpose is to fund the preparation of data sets of optimized data are not suitable for this submission. A separate call for preparing data sets will be published
2. The research will be under the joint supervision of two faculty members: one from the core of data science and the other from the data science periphery (or both from the periphery, if the research topic develops a new DS methodology and does not just use existing methods and tools).
3. Research applications with only one supervisor from core DS (see the Vatat definition of core DS below) , and has published in the last 3 years papers developing new DS methods. Only about 20% of all scholarships will be given to such applications with one supervisor.

4. Please submit a two-page research proposal in English, as described below.
5. The applicant has completed his/her Master's degree.
6. The applicant is committed to:
 - a. Scholarship recipients will be able to work during the scholarship period in various jobs (including as "teaching assistants", "and other jobs") on average 5 hours per week and provided that their work is teaching at the University of Haifa. The work can include teaching one course per year, or recitation course per semester, and with the written approval of the dissertation supervisor. The work of the scholarship holder will be at full pay (separate from the scholarship), for which income tax will be lawfully deducted.
 - b. Complete the Ph.D. within 3 years, or at most 4 years from the beginning of the scholarship
 - c. Participate in at least 80% of the DSRC research activities, and present their research work.
 - d. Participate in at least one data science course offered by the center.
 - e. Submit a yearly report.
 - f. All publications supported by DSRC funding should acknowledge the "Data Science Research Center at the University of Haifa".
7. In case of a suspension of the research work for 6 months or more, it is required to receive a permission from the advanced studies authority at the university
8. In order to avoid double funding, in cases where the doctoral student has received scholarships and grants originating from public budgeting, in addition to this scholarship, participation in the scholarship will be canceled.
9. Second and third year scholarship is contingent on adequate progress being made in research and on the continued funding sources of the center.
10. Researchers who are supervising the scholarship recipient are required to participate in the activities of the DS Research Center.

Priority will be given to the following applications:

- **The supervisor will cover 19,000Nis per year of the scholarship (about 20%)**
- **Applications with researchers from different departments have an advantage.**

Submission of applicants

Only outstanding doctorate students whose research deals with the core and periphery of DS, as defined by the steering committee of the Vatav, will be submitted as candidates for scholarships, as detailed below:

“Data science deals with principles and the development of methods for collecting, storing and analyzing data, for inferring, predicting and creating knowledge from them, while addressing human and social aspects of the process. The research topics at the core of the process (in the above order) are: methods for collecting data by experiments, sampling, mining and search engines; Methods for storing, accessing the data for analysis and calculation (distributed) on database / information systems, and of big data. Developing data analysis methodologies such as neural networks and deep learning, reinforcement learning and adaptive control, statistical learning, and statistical inference; This is in order to build algorithms and models for sorting and predicting, validating them, using them to create knowledge and make it accessible (visualization); Reference to special data such as image processing and computer vision, natural language processing, speech and hearing. Network analysis, longitudinal data, temporal and spatial data and survival data. All this, with reference to ethical aspects in relation to the individual, such as privacy and confidentiality, and to society, such as frequency and validity of the use of the results.

The DS periphery areas include: Artificial Intelligence, Optimization, Operations Research, Robotics, Game Theory, Stochastic Processes, Information, Control, Signal Processing, Bioinformatics, Computational Biology, Digital / Personal Medicine, Epidemiology, Econometrics, Psychometry, Cyber, Quantum computing, Management and Construction of databases / information.”

General conditions for applicants

The candidate for the scholarship will have a Master's degree in research whose document of intent for the doctorate has been approved, or a student in the doctorate program without a Master's whose document of intent for the doctorate has been approved. In both cases, the candidate's submission will be made after no more than one year from the date of approval of the doctor's statement of intent document. The doctoral research proposal must be approved within one year from the date of application.

Submission

Submission will be made by one of the supervisors to Dr. Irith Hartman irith.hartman@gmail.com according to the attached format in font 12 and line spacing 1.5 including:

- 1) A 2-pg CV of the applicant including publications list according to the attached template.
- 2) A 2-pg description including:
 - a. Title and background on the topic of research and its importance
 - b. Novelty of the research, its interdisciplinary aspect and potential for development of new core DS methods
 - c. The supervisors, their expertise, and collaboration between them.
Collaboration between distant fields will be an advantage.
- 3) BA and MA grade transcripts and graduation certificates.
- 4) Commitment of the applicant not to be hired for more than 5 hours per week on average + student declaration
- 5) A recommendation letter from the supervisors, according to the attached template.
- 6) Names of three other recommenders and contact details.

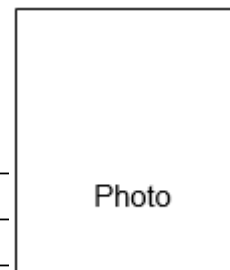
Application deadline is: October 14, 2022.

The DSRC scientific committee will consider all applicants, and decision will be made by November 3, 2022.

For any other information please write to Dr. Irith Hartman irith.hartman@gmail.com

1. CV- Personal Details

Family name _____ First name _____
 Date of birth _____ Country of birth _____
 Citizenship _____ Male / Female Family status _____
 Student no./I.D: _____ Address _____
 Cellular phone no. _____ E-mail _____
 Academic Department _____



a. Academic studies (please attach copies of your transcripts and diplomas):

Degree	Grades	Institution	Years
Bachelor	BA average grade:		
Master	MA average grade:		
	Thesis grade:		

b. Awards, Excellency, Articles published, etc:

Award/ Scholarship	Year

c. PhD Supervisors:

Name	Position	Institution/ Department

d. Work expertise:

Institution/ Department	Position	Year

e. List of publications

Any further information related to academic, research and/or social achievements. _____

3. BA and MA grade transcripts and graduation certificates

4. Request for authorization for work when applying for scholarship – no more than 5 hours per week, on average, or one academic course a year. (Even if you are not working, you are required to complete this form.)

To: Graduate Studies Authority

From:

Name: _____

Student no./I.D: _____

Department: _____

Address: _____

Cellular Phone no.: _____

I hereby declare that I do not intend to work while receiving a scholarship.

I would like to receive approval for the following remunerated activities:

First Semester:

Place of work _____

Extent of position (%) _____

Working hours per week _____

Working days per week _____

Second Semester:

Place of work _____

Extent of position (%) _____

Working hours per week _____

Working days per week _____

Student Signature

Date

5. Graduate Studies Scholar declaration for 2022-2023:

I, signed below, _____, commit and declare that if I receive a scholarship:

1. I will dedicate most of my effort and time to study and research.
2. I will undertake to prepare a progress report as requested and submit the research proposal for review by the departmental Ph.D. Committee / General University Committee no later than the set date. I will complete the course requirements as they exist. I am aware that if I do not meet the deadline for submitting the proposal, the Dean of Graduate Studies will be entitled to cancel the scholarship.
3. I will proceed with the research plan without any interruption and fulfill all the requirements related to the research work (a research student who goes on sabbatical / work from a proper workplace for the current school year will issue a certificate that he / she has arranged the vacation for the entire scholarship period).
4. Apart from research, I will not accept a job for which I will be offered monetary compensation except for teaching assistance - up to one course a year, and even with the written approval of the doctoral dissertation supervisor and the dean for advanced studies as detailed below:
5. I am aware, according to the bylaws, that the dean of advanced studies may cancel the scholarship at any time, in cases where I do not meet the academic requirements or terminate my studies at the university (either on my own initiative or on the initiative of the university). The scholarship will also be canceled by the dean if it turns out that it was given on the basis of false details. In addition, the scholarship will be revoked at the discretion of the dean, if it is found that I have committed a disciplinary offense by the university disciplinary authorities. In any case where the scholarship is canceled, I will be required to return the amounts I received at the expense of the scholarship at rates to be determined by the University. Scholarship termination can be without prior notice.
6. I am aware that the Income Tax Ordinance exempts scholarships from tax given to students to finance their tuition or for sustaining them during the study period, which was given to them during their studies at an educational and research institution, as long as no exchange was given for the scholarship by the student. A scholarship includes, for this purpose, a grant, award or exemption from payment. A scholarship that does not meet the conditions of the ordinance, such as, given outside the student's period of study as defined in the ordinance, or given in return for the scholarship by the student, will not be exempt from tax. Therefore, I may be required to pay tax in the future, at my own expense, for the scholarship awarded to me. The tax payment will be by way of deduction at source or in any other way and I agree to this in advance.
7. I am aware that the University reserves the right to periodically conduct sample tests regarding my various occupations.
8. I will participate in at least 80% of the activities of the Data Science Research Center (at least 9 per year).

9. In all my publications I will acknowledge the support of the Data Science Research Center at the University of Haifa.

Student Signature

Student No/I.D.

Date

6. Supervisor's Approval

Name: _____ Name: _____

Department: _____ Department: _____

I have read the terms and goals of the scholarship. The student's details correspond with the information I am aware of. The scholarship will contribute to the progress of the student as well as to the department.

I support the application (**detailed letter of recommendation is required**)

I am able and intend to support 20% of the scholarship with funds available to me.

With regard to the student's application for approval for activities in addition to the scholarship:

To the best of my knowledge of the student, the request for paid activities will not harm the research and the progress of studies

I do not recommend approving the student's application for paid activities: (reasons which are known to the supervisor and Ph.D. committee, but unknown to the advanced studies authority)

Supervisor's signature: _____ Date: _____

7. Names of three recommenders and contact details (mail and phone number)