



Texas A&M Institute of Data Science Data Science Ambassador Scholarship Program

Program Description: The Texas A&M Institute of Data Science (TAMIDS) solicits applications to its Data Science Ambassador Scholarship Program from Texas A&M PhD students who wish to serve as representatives for TAMIDS and champions for Data Science literacy in their departments. The competitive program will provide ambassadors with leadership, technical and training skills which they will practice through engagement in their home departments. Ambassadors will also act as a point of contact for TAMIDS in their departments. Scholarship applicants must have completed at least 1 year of a Texas A&M PhD program at the time of application. The Data Science Ambassador Scholarship Program aims to help ambassadors become *agents for change* who will catalyze the adoption of Data Science, both at Texas A&M, and in their subsequent careers.

The elements of the ambassador program are:

- **Training:** Ambassadors will complete TAMIDS Data Science technical training materials and practice their delivery in a group setting with the TAMIDS mentors.
- **Engagements:** Ambassadors will plan, develop, and deliver engagements for Data Science literacy in their departments (see below for examples), under the mentorship of the TAMIDS program organizers.
- **Group Meetings:** Ambassadors will participate in monthly group meetings with the TAMIDS mentors, with supplemental meetings as needed.
- **Faculty Mentors:** In their application, each Ambassador will identify a faculty mentor in their department with whom they will consult on design and implementation of their proposed engagements. The faculty mentors will also provide a brief assessment of the operation of the engagements to the TAMIDS mentors at the end of Fall and Spring semesters.
- **TAMIDS Representation:** Ambassadors will learn about TAMIDS capabilities for training and research support and refer departmental members to these as needed.
- **Expected Time Commitment:** Ambassadors' total activities in the program should average about 5 hours per week.
- **Scholarship Award:** each ambassador will receive a scholarship award of \$2,000 for the 2022-2023 academic year, payable in two \$1,000 installments, in August 2022 and January 2023. This award qualifies ambassadors for the Non-resident Tuition Waiver for Competitive Scholarship Recipients.

Engagements for Data Science Literacy: The program is designed such that ambassadors have the flexibility to align their engagement plans to activities that leverage what they are already doing or would like to pursue within their department of program. An ambassador's plan for supporting Data Science literacy over the course of the year could include (but not limited to) elements from the following list (not all are needed) but applicants may propose other engagements not listed below:

1. Identifying Data Science needs within their department and developing strategies to address these.
2. Developing learning materials adapted to the needs of their departments, based on TAMIDS materials or other resources
3. Becoming qualified to deliver relevant external training resources, e.g. the Carpentries



4. Delivering Data Science training and workshops based on 2 and 3 above.
5. Holding regular in person or online drop-in consulting sessions for departmental students and researchers.
6. Holding coaching sessions for students seeking Data Science careers
7. Joining in TAMIDS Bring Your Own Data sessions for participants within the department or college and following up with those participants
8. Designing and delivering TAMIDS training events or workshops as instructor or co-instructor.

The ambassador program attaches priority to promoting Data Science literacy in communities of students and researchers (specified, e.g., by subject domain and/or level of experience) in which Data Science skills and expertise is not currently strongly represented. After admission to the program, ambassadors may choose to collaborate on engagements. (Note: collaborative engagements with other applicants should not be proposed in applications to the program because applications will be assessed individually). Materials and programs created by ambassadors will form resources that ambassadors in future years may use or extend. To this end, ambassadors will create archives of materials developed and an accompanying report on their activities by the end of the Spring 2022 semester.

Eligibility: At the submission deadline, applicants must:

- Have completed at least one year enrolled in a PhD program in a [College or School of Texas A&M University or its branch campuses in Galveston or Qatar](#)
- Expect to maintain enrollment in their PhD program for the 2022-2023 academic year.
- Have a cumulative GPA of 3.5 or higher in their program at the application deadline.
- Have completed at least two methodological and/or domain focused graduate or advanced undergraduate courses involving significant Data Science content.
- Possess computer programming skills in Python / R / MATLAB / C / C++ / Fortran or other relevant programming language, demonstrated through course work and/or project work.

Application Process: Each applicant must submit an application package as detailed below. Some applicants may be invited for an interview with the program organizers as part of the review process.

The application package must comprise a single pdf file comprising the items listed below. submitted by email to datasciencejobs@tamu.edu with the subject line "Application to TAMIDS Ambassador Scholarship Program" by the deadline of 11:59pm, April 4, 2022. Awards will be communicated by May 17, 2022.

1. Cover page listing
 - a. Title: Application to TAMIDS Ambassador Scholarship Program
 - b. Applicant summary: name, email address, department, college or school, degree program
 - c. Faculty mentor summary: name, email address, department
2. Applicant Materials
 - a. Applicant Resume (2 pages maximum). The resume should list all graduate courses completed and in progress at Texas A&M, and any other courses, training, or activities that the applicant wishes to be taken into consideration as preparation for the Data Science Ambassador.
 - b. Applicant Texas A&M Transcript; an unofficial transcript printed from Howdy is acceptable
 - c. Applicant Statement (1 page maximum) including:
 - i. Their interest in Data Science and motivation to become a Data Science Ambassador
 - ii. Their background and prior relevant experiences such as applications of Data Science and activities promoting Data Science literacy

- iii. Their proposed engagements undertaken within their department to promote Data Science literacy. Particular weight will be given to activities that extend knowledge in Data Science to communities of students in which it is currently not strongly represented.
- d. (Optional) Letter of support (1 page maximum) from a writer other than the faculty mentor commenting on any previous experience of the applicant similar to the ambassador role.

3. Faculty Mentor Materials

- a. Faculty Mentor Statement (1 page maximum) including:
 - i. Assessment of the applicant's preparation to act as a Data Science Ambassador
 - ii. Assessment of the fit of proposed engagement with College or Departmental programs and goals
 - iii. Commitment to advise and facilitate the applicant's proposed engagements, if awarded
 - iv. Commitment to provide two brief assessments (at end of the Fall and Spring semesters) of outcomes applicant's engagements, if awarded.

Renewals: Ambassadors may apply for renewal of their scholarship for one further year under the following conditions:

- Ambassadors must have a cumulative GPA of 3.5 or higher at the end of the Spring 2023 Semester
- Ambassadors must have completed at least one substantive engagement proposed in or derived from their original application.
- Ambassadors must have completed their activity report and archive of developed materials.
- Ambassadors must submit a one-page statement of their planned engagement for the second year to the Program Director by June 1, 2023, accompanied by a statement of continued support from their faculty mentor.

Questions and Answers

1. How many Data Science Ambassador Scholarships will be awarded?

It is expected that up to 8 Data Science Ambassador Scholarships will be awarded for the 2022-23 Academic Year.

2. Is it possible for students to join the program without having received a scholarship award?

No. The program size was chosen to ensure sufficient engagement with ambassadors during the TAMIDS mentoring portions of the program.

3. Are there any quotas for award of scholarships by department or college?

No

4. Do ambassadors qualify for non-resident tuition waivers?

Yes. Ambassadors become eligible for the Non-resident Tuition Waiver for Competitive Scholarship Recipients for the academic year 2022-23, and in the following year if the scholarship is renewed.

5. Does the faculty mentor need to be the applicant's PhD advisor?

No, but the advisor should be familiar with the applicant's academic career.

Data Science Ambassador Program Organizers and Contacts

Dr. Shahina Rahman, Program Director

srahman@stat.tamu.edu **Contact for program mentoring**

Instructional Assistant Professor, Department of Statistics
ConocoPhillips Data Science Faculty Fellow, 2021 and 2022
TAMIDS Coordinator for Student Initiatives

Christina Retzer, MBA, Scholarships Coordinator

ceretzer@tamu.edu **Contact for scholarship awards**

TAMIDS Program Coordinator II

Dr. Jian Tao, Program Advisor

jtao@tamu.edu

Assistant Professor, Department of Visualization
TAMIDS Assistant Director for Project Development

Acknowledgement: The TAMIDS Data Science Ambassadors program was inspired in part by the [Data Science Ambassadors](#) program at the University of Arizona. Many thanks to [Blake Joyce](#) for sharing his insights and experience of the University of Arizona program.