

Texas A&M INSTITUTE OF DATA SCIENCE

The Texas A&M Institute of Data Science (TAMIDS) pursues new approaches to data science research, education, operations and partnerships. These approaches cross college boundaries to connect elements of data science from engineering, technology, science and the humanities and inform wider social challenges.



RESEARCH AFFILIATES

The Texas A&M Institute of Data Science Research Affiliates Program aims to increase visibility for Texas A&M data science researchers and involve them in developing and joining activities under the auspices of TAMIDS. The program is open to all Texas A&M faculty (in tenure, professional, instructional, research and other tracks), research scientists, postdoctoral researchers and administrative and operations staff and professionals whose role and interests include data science.

DATA SCIENCE EDUCATION, TRAINING, AND RESEARCH SUPPORT

TAMIDS helps students, faculty and researchers acquire skills and expertise in data science through education, training, and support. Current programs include:

► Bring Your Own Data Consultancy:

Available weekly, these one-on-one online sessions with a TAMIDS data scientist can help with formulating approaches to your data science research project and assist with developing code to take advantage of the latest data analytics methods and high-performance computing facilities.

► Data Science Bootcamps:

The Data Science Bootcamp is an intense five-day, hands-on program that introduces students, researchers and staff to fundamentals of data science. The program is intended to provide participants new to data science with hands-on skills and experience that will enable them to rapidly incorporate data science into their research and educational projects.

► **STEM Outreach:** TAMIDS works with Texas A&M faculty and outreach programs to provide students and educators in kindergarten through 12th grade with unique non-credit STEM (science, technology, engineering and math) courses. These programs engage class participants with real world experiences in data science.

► **Webinars and Tutorials:** Led by experts across Texas A&M in both synchronous as well as recorded sessions, these events help develop skills and expertise in methods, tools and systems used in varied foundational and application domains of data science.

► **Seminars:** A weekly seminar featuring leading external speakers from a broad range of domains within data science is hosted in conjunction with departments across Texas A&M.

► **Student Competition:** Held annually in the spring, student teams work together on a real-world problems and develop the best models to solve them.

► **Traineeship Program:** This program matches faculty, researchers and students to data science research projects, with TAMIDS providing assistance in project development, consultancy, and student mentorship.

► **Program and Course Development:** TAMIDS collaborates with Texas A&M departments, colleges and faculty to develop degree programs, certificates and innovative courses in foundations and applications of data science and supports faculty effort through its Data Science Course Development Program. TAMIDS coordinates the master's of science degree in data science and certificate programs with Texas A&M academic units.

► **Research Collaboration:** TAMIDS data scientists are involved in collaborations with academic, agency and administrative units at Texas A&M that use data science both in fundamental research and to enhance the operations of the university.

► **Research Support and Engagement:** TAMIDS Thematic Data Science Labs Program supports groups of faculty in developing knowledge, resources and community around emerging areas of data science, encompassing research, education and outreach. The Data Science Career Initiation Fellows Program supports early career faculty in developing new engagements and programs in data science with TAMIDS.

PROPOSAL SUPPORT

TAMIDS has developed “building blocks” for the data science ecosystem that can support proposals for extramural funding. These components include:

Service and enablement: TAMIDS staff data scientists acting as research collaborators and consultants

Course development: Adapting data science educational and training materials developed by TAMIDS as components of innovative certificates, minors and degree programs in foundational and application domains of data science

Training development: Incorporating proposed data science research products into training materials and systems for instructor-led and self-study education

Training operations and outreach: Operating training courses in data science for students and faculty, including outreach for student participation and training of instructors from minority serving institutions



GRANTS AVAILABLE

► TAMIDS solicits proposals for one-day workshops in any area of data science. The aim of the TAMIDS Workshop Grants Program is to support community building, stimulate collaboration and foster interdisciplinary growth in data science among researchers at Texas A&M.

► TAMIDS Graduate Travel Grants Program supports graduate students to attend and present at conferences in any domain of data science. Awards of up to \$500 will be made under the program.

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