



TEXAS A&M
Institute of
Data Science

THEMATIC LABS PROGRAM 2025 REQUEST FOR PROPOSAL

INFORMATION SESSION



Texas A&M Institute of Data Science



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TAMIDS.TAMU.EDU



About Texas A&M Institute of Data Science



Our mission is to lead & support the growth of artificial intelligence, machine learning, and other areas of data science through research, education, service, and partnerships.

CORE ACTIVITIES



EDUCATION



RESEARCH



SERVICE

FOUNDING AGENCIES



Texas A&M Engineering
Experiment Station



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What We Do



Education Coordinates MS in Data Science and Capstone with Colleges

Training Workshops, Bootcamps, Seminar Series

Research **Seven** Thematic Labs in emerging areas of Data Science & AI, **65** Thematic Labs members, and over **200** Research Affiliates

Students Over **2,000** annually engaged in training, hackathons & events

Industry Professional training; affiliate program pipelining to student talent

Support Seed Funding, Course Development, Consultancy; **11** Programmatic Faculty & Administrative Staff, **6** Research Staff & Postdocs





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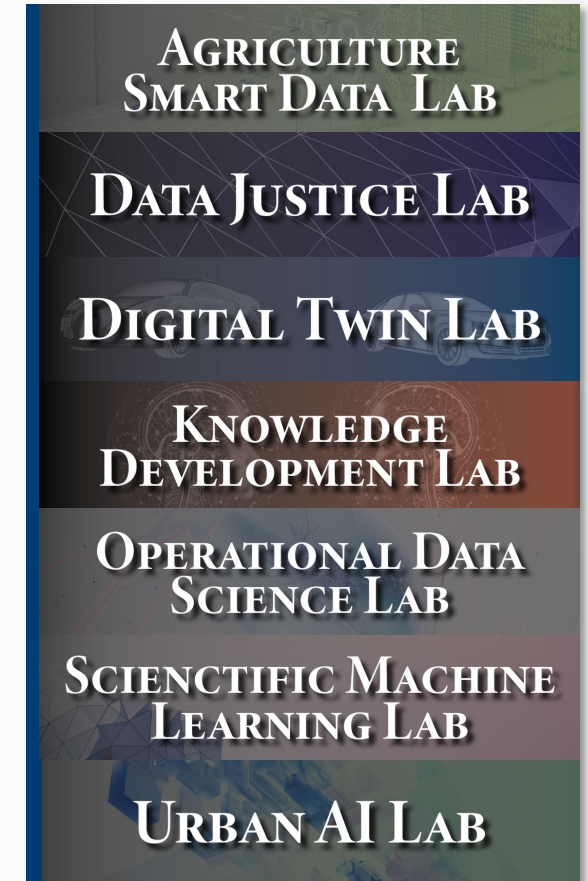


Thematic Lab Program Overview

Exploring themes in Artificial Intelligence, Machine Learning, and strategic areas of Data Science.

What is a Thematic Lab

- ❖ Independent research groups dedicated to developing knowledge, resources, projects, and research innovations around a focus area
- ❖ Position Texas A&M at the leading edge of research and enhance competitiveness for external funding
- ❖ Collaborate across different research areas, colleges, and disciplines



Program Details



General Program Aims

Support cutting-edge research in Artificial Intelligence (AI), Machine Learning, and Data Science at Texas A&M University.

This Solicitation

Focus on AI foundations, applications, and transition into specific domains.

Thematic Labs Connect

- ❖ *Broader communities*
- ❖ *Researchers and Subject Matter Experts*
- ❖ *External Collaborators and Industries*
- ❖ *Students and Educators*



Lab Activities



PILOT RESEARCH PROJECTS

Propose and receive funding for two pilot research projects in the thematic area.



DISSEMINATE OUTCOMES

Increase Texas A&M's visibility and broaden impact through tutorials, workshops, student research, and outreach activities.



INCREASE TEXAS A&M CAPACITY

Create and share new methods, datasets, and software that expand Texas A&M's capacity in the thematic area.



ENGAGE TAMIDS COMMUNITY

Have opportunities to participate in TAMIDS activities and programs that leverage our extensive network of collaborators.

Support



Annual Financial Support for Two Years

- ❖ \$20,000 each, for two pilot research projects
- ❖ \$5,000 research stipend for Lab Director
- ❖ \$10,000 stipend split amongst other members
- ❖ Full-time postdoctoral researcher



Administrative Support

- ❖ Community Engagement Support
- ❖ Proposal Development
- ❖ Lab Website & Marketing

Requirements – Members

- ❖ Each lab is organized by a team of **4–6** Texas A&M University PI-eligible personnel, including a lab director
- ❖ Members must have adloc at:
 - *Texas A&M University* (TAMU) at College Station and associated campuses and organizations (including the *Health Science Center*)
 - *Texas A&M Engineering Experiment Station* (TEES)
 - *Texas A&M Engineering Extension Services* (TEEX)
 - *Texas A&M AgriLife Research* and *Texas A&M AgriLife Extension*
 - *Texas A&M Transportation Institute* (TTI)
- ❖ Directors must be tenure-track (equivalent) and not be a director of a current Thematic Lab

Requirements – Impact Criteria



RESEARCH

Advance and innovate in frontier or foundational areas



STRATEGIC

Research societal, strategic, or emerging challenges



FUNDING

Develop large-scale proposals for extramural funding



ECOSYSTEM

Expanding Texas A&M's knowledge base and capacity in AI

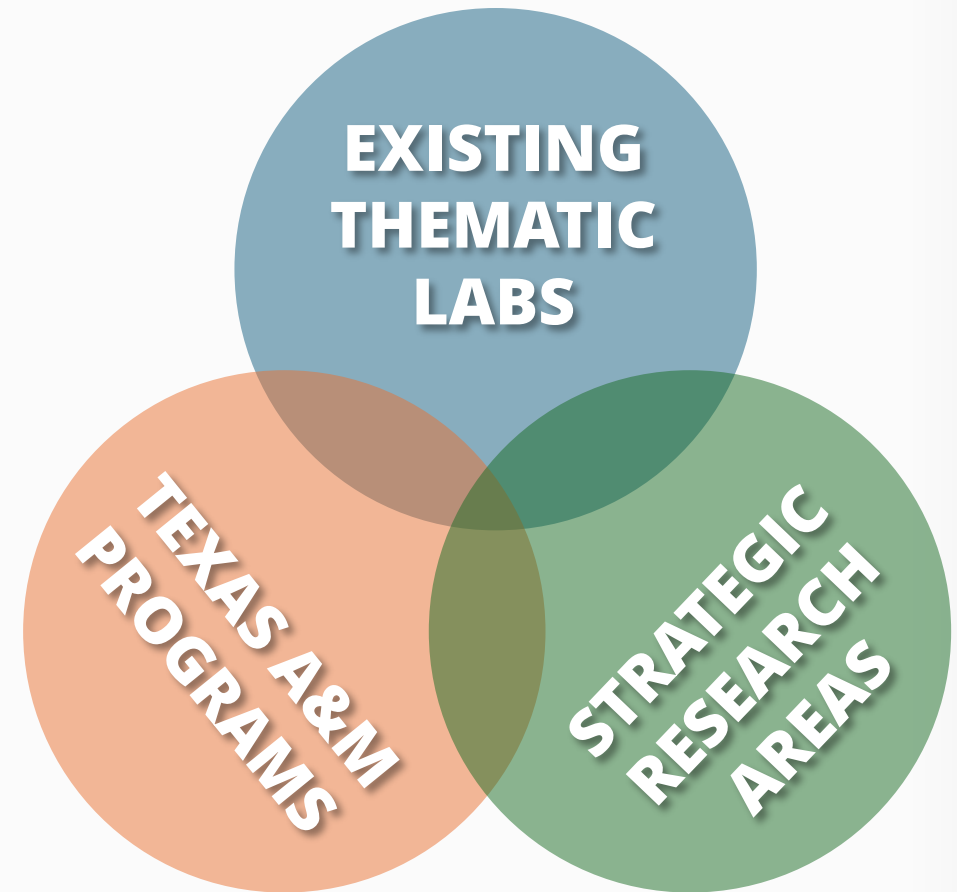


ALIGNMENT

Build on Texas A&M resources, infrastructure, and knowledge

Requirements – Thematic Overlap

- ❖ Priority is given to proposals whose theme does not overlap significantly with existing Thematic Labs or programs
- ❖ May build on such projects to foster the growth of a distinct new ecosystem



Requirements – Sustainability

❖ **Proposals Developed by the Lab**

Proposals for extramural funding should include support for postdocs commensurate with their contributions. Additive to TAMIDS support.

❖ **Continuing TAMIDS Support**

TAMIDS will continue administrative support beyond the two-year initial period.

❖ **Lab Initiatives**

Proposals should describe other steps that the lab will take to promote sustainability.

Proposals for New Thematic Labs



u.tamu.edu/ThematicLabs

For the 2025 solicitation, Labs focus on foundational AI advancements, domain-specific applications of AI, or a combination of both to drive innovation and enhance Texas A&M's competitiveness for external funding.

We solicit proposals to establish new Labs, through a competitive grant proposal process. TAMIDS supports each awarded Lab for a two-year period through a combination of seed funding for new research, effort from TAMIDS personnel, administrative support, and opportunities to engage with the TAMIDS network of programs, partners, and participants.

2025 Request for Proposals

PUBLIC INFORMATION SESSION

Thursday, March 20 | 1:15–2:15 PM

[Zachry 298 \(Chevron Rooms\)](#) & [Zoom](#)

The session will cover the Thematic Lab Program, what is required for proposals, and provide an opportunity to meet with Institute members and have a few snacks.

Submit Thematic Lab Proposal

Click on "Submit Thematic Lab Proposal"

PROPOSAL SUBMISSION DEADLINE

APRIL 21, 2025, 11:59 PM CST

Awards Announced by May 19

u.tamu.edu/ThematicLabs



Post Award and Operations

Thematic Lab Launch

- ❖ Formalize Operating Agreement
- ❖ Hold Kick-Off Meeting
- ❖ Hire a Postdoc
- ❖ Commence activities by September 01, 2025

Review—Sustaining Support

- ❖ Annual, Workshop, and Final Report
- ❖ TAMIDS Director and Lab Directors meet Three Times Annually
- ❖ Proposals developed by the lab



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Proposal Layout and Guidance

*Full proposal guidelines and optional template are
available at u.tamu.edu/ThematicLabs*

Proposal Format & Structure

File Format

- ❖ Submit as a single PDF file via Qualtrics Form (see website)
- ❖ Minimum
 - Arial 10pt font
 - One-inch margins all around

A proposal template (Optional) is available on the Thematic Labs program page.

Sections and Page Limits

Cover Page	1 page
Lab Theme and Impacts	2 pages
Pilot Project Overviews	1 page each
Lab Team	1 page
Member Resumes	2 pages each
(Optional) Stakeholder Letters	1 page each
(Optional) Other Information	1 Page

Cover Page

- ❖ **Heading “TAMIDS Thematic Lab Proposal”**
- ❖ **Proposed Lab Name** [100 characters maximum]
- ❖ **List of 4–6 Lab Members** [List Lab Director First]
Name, Title, Department, Institution, Email, and Lab Role
- ❖ **Lab Summary** [200 words maximum]
Goals, Objectives, and Overall Research Thrust
- ❖ **List of Stakeholders**
Name, Affiliation

Stakeholders are individuals or organizations at Texas A&M that expect to benefit from lab activities (from ecosystem impact) or contribute to its success (through alignment impact)

Lab Theme and Impacts

❖ Describe the Thematic Research Area

Focus on AI foundations, applications, and transition into specific domains.

Recommendation: Show the research area's innovation, interdisciplinary connections, and future potential.

❖ Articulate the impact your lab will

Research, Strategic, Funding, Ecosystem, and Alignment Criteria

❖ Describe Sustainability Actions the lab will take

Recommendation: Target various funding source types (federal, state, industry, and private foundations) to account for potential changes in the funding landscape.

Pilot Research Project Overviews

Propose two (2) pilot projects that highlight your lab's goals and thematic area

- ❖ Define the Problem and Its Importance
- ❖ Leverage Team Expertise and Preliminary Results
- ❖ Detail Approach and Anticipated Outcomes

Required Components

- ❖ Problem Description & Motivation
- ❖ Preparation and Preliminary Results
- ❖ Proposed Research and Approach
- ❖ Outcomes and Products
- ❖ Ecosystem Aspects
- ❖ Project Budget (\$20k each, annually)

Any bibliographic references and figures used do not count toward the page limit and should be included at the end of the proposal.

Lab Team and Preparation

❖ Team Preparation

Detail team members' experience and expertise, including the lab director's leadership.

❖ Team Coherence

Explain team coherence through existing collaborations, shared systems, data, methods, or common interests.

❖ TAMIDS Postdoc

Describe the lab postdoc's role in pilot projects and ecosystem development, specifying the required skills and experience.

❖ Highlight Unique Strengths of Members

Emphasize the unique strengths and expertise of your team members.

Other Sections

❖ Member Resumes

Provide resumes, two (2) pages each, for all lab members and any candidate for the postdoc position

❖ Stakeholder Letters

Each one (1) page maximum, from individual or organizational stakeholders in Texas A&M

❖ Any Other Information [One Page Max]

May include additional information for consideration



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Thematic Lab Proposals

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Key Functions of Thematic Labs



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Research Development

Thematic Labs focus on advancing and innovating in foundational areas of Artificial Intelligence (AI) or applying AI to specific domains. They conduct pilot research projects to explore new methods, datasets, and software.

Capacity Building

Labs aim to increase Texas A&M's capacity in AI by creating and sharing new resources, contributing to infrastructure, and expanding the knowledge base in their thematic area.

Dissemination & Outreach

Labs work to increase the visibility and impact of their research outcomes through tutorials, workshops, student research, and outreach activities. This helps to widen proficiency, participation, and literacy in AI.

Engagement & Collaboration

Thematic Labs engage with the broader TAMIDS community and participate in TAMIDS activities. They collaborate with other labs, industry partners, and stakeholders to enhance their research and ecosystem development.

Sustainability

Labs are designed to foster sustainable ecosystems that continue beyond the initial two-year funding period. They aim to secure additional funding through large-scale proposals and develop initiatives to ensure long-term viability.

u.tamu.edu/ThematicLabs



Frequently Asked Questions



How many Thematic Labs will be funded?

Up to two Thematic Lab awards are anticipated in the current cycle.

Why is there a limit to the number of proposed lab members?

The Thematic Lab should have focused interlocking goals for research, education, resources, and broader ecosystem development, with specified members taking on roles to implement these. The limit aims to promote tight coordination between lab members.

Can a lab member have more than one role specified on the title page?

Yes, but distributing roles amongst lab members is encouraged to sustain involvement in the lab operations.

Why are team members limited to one proposal?

This limit encourages team members to commit to playing a substantive role in their chosen proposal.

Can Labs acquire additional members after commencing operations?

Awarded Labs may add affiliate members from any organization (within Texas A&M or external) to build community and collaboration, including, but not limited to, individual stakeholders. Affiliate members do not receive funding from the Lab.

