

IUSSTF U.S. - INDIA ARTIFICIAL INTELLIGENCE (USIAI) INITIATIVE

**Enabling AI Innovation:
Addressing Challenges and Opportunities at the Interface of
Science, Technology and Society**

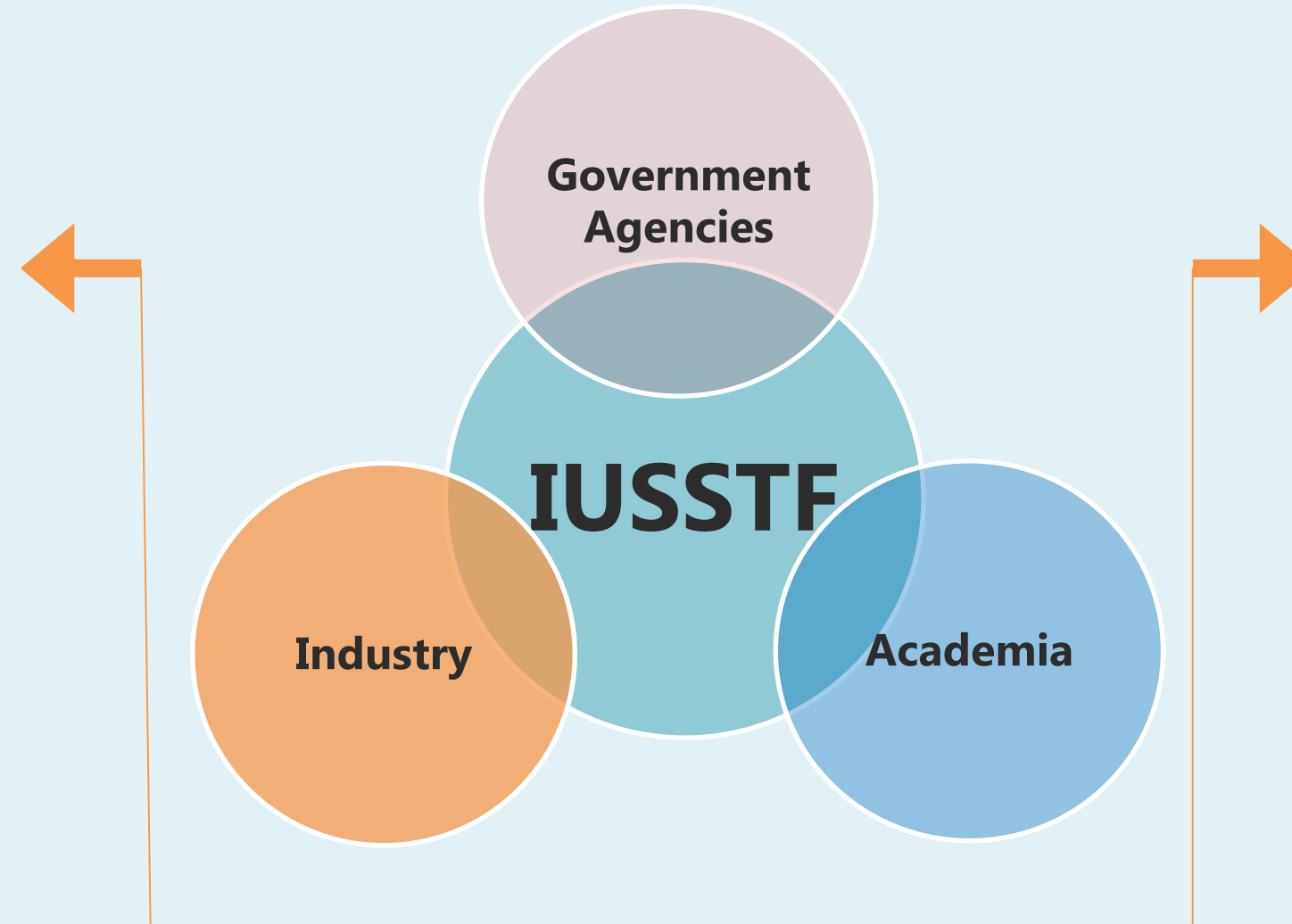
Indo-U.S. Science and Technology Forum



www.iusstf.org

IUSSTF: WHO WE ARE

The Indo-U.S. Science and Technology Forum (IUSSTF) established in 2000 under an agreement between the Governments of India and the United States.



Operates through two bilateral agreements:

- Indo-U.S. Science and Technology Forum (2000)
- United States-India Science and Technology Endowment Fund (2009)

IUSSTF

“Catalyzing Science, Technology and Innovation Collaborations for 20 Years”

Nodal Agencies



WHAT WE DO

Identify “leading edge areas” that are high-priority for both nations

Bring together key stakeholders to help create synergies

Support workshops/ networking opportunities to initiate new collaborations

Act as a catalyst to promote long-term scientific collaborations - individual and institutional.

IUSSTF PROGRAM PORTFOLIO

Scientific Networks

- Bilateral Workshops/Training Programs
- Indo-U.S. Virtual Network Centers

Research & Development

- Indo-U.S. Joint Clean Energy Research and Development Centre (JCERDC)
- Indo-U.S. PACESetter Fund
- Real Time River Water and Air Quality Monitoring (WAQM) Program

Innovation & Entrepreneurship

- U.S.-India Science and Technology Endowment Fund (USISTEF)
- India Innovation Growth Program (IIGP)

Visitation & Fellowships

- Several Visitation Programs at Undergrad, Post grad, Doctoral and Post-doctoral levels

BILATERAL WORKSHOPS
404

VIRTUAL NETWORK
CENTERS
100

R&D PROJECTS
28

USISTEF PROJECTS
43 (10 Calls)

INTERNS &
FELLOWS
1638

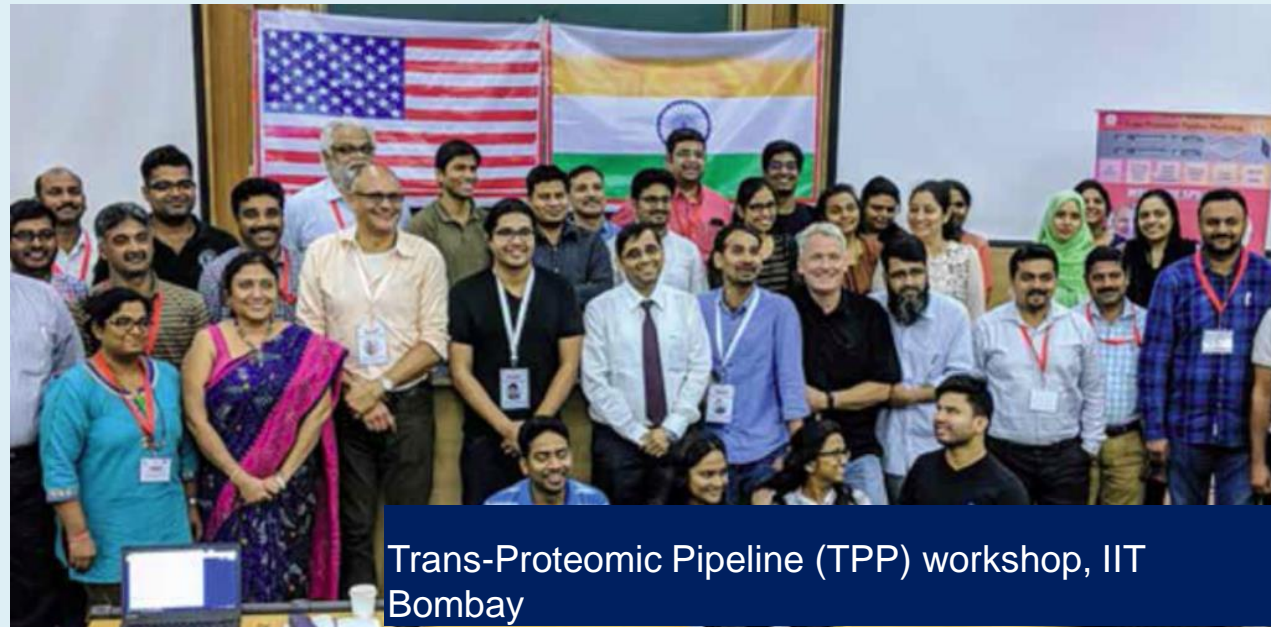
IUSSTF Projects: A Glimpse



Affordable Digital Braille Accessibility



Air Quality Monitoring



Trans-Proteomic Pipeline (TPP) workshop, IIT Bombay



GROWTH: Global Relay of Observatories Watching Transients Happen



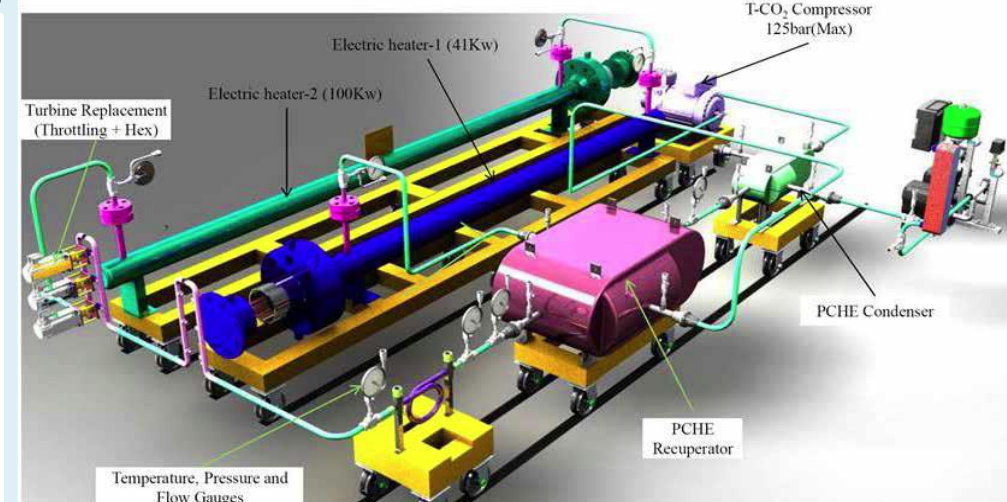
Indo-U.S. Frontiers of Engineering Symposium



Commercializing a Scalable and Low-Cost Arsenic Remediation Technology for Societal Impact



Clean Energy and Power Source for Rural Households in India



Solar Energy Research Institute for India and the United States



Moving Beyond the Pavement: Affordable Mobility for Users



Affordable and User-Centric Knee Joints to Remobilize Above-Knee Amputees



U.S. - India Center for Building Energy Research & Development (CBERD)

Partners

India

Federal Agencies



Industry and Industry Associations



Ecosystem Partners



United States

Federal Agencies



Industry and Industry Associations



Professional Bodies



University Partners





IUSSTF U.S. INDIA ARTIFICIAL INTELLIGENCE (USIAI) INITIATIVE

THE DATA REVOLUTION: FUELING AI

Rapid advances in computing infrastructure, development of new technologies coupled with the low cost of data acquisition and storage have led to the generation and collection of vast amounts of data:

- Public health and economic data from governments and agencies
- Transactional data from companies
- Clinical and biomedical data from hospitals
- Social media data
- Streaming data from the Internet-of-Things

The data revolution is driving AI innovation. AI tools and technologies are:

- Enabling breakthroughs in many fields of science and engineering;
- Leveraging these scientific breakthroughs to enable progress on pressing societal challenges, and
- Fundamentally transforming several sectors of the economy.



X=Health Care



Agriculture



Smart Cities



Transportation



Energy



Education

Why U.S. – INDIA AI

- Provides a unique opportunity for the world's two largest democracies to strengthen their strategic partnership by focusing on AI cooperation in critical areas that are priorities for both countries.
- Aligns with the shared values of openness, transparency, and reciprocity and encourages innovation that will benefit both countries.
- Builds on a strong foundation of S&T cooperation.
- Leverages the complementary strengths of the S&T communities.
- Engages the large Indian diaspora in the United States and leverages investments by leading U.S. Tech companies in India.

USIAI : THE PLAN

GOALS

Strengthen the U.S.-India strategic partnership by focusing on AI cooperation in critical areas that are priorities for both countries.

Build on key priorities, recommendations, and common challenges articulated in the Strategic Plans.

Provide a platform for key Stakeholders to:

- **Identify opportunities for bilateral AI R&D collaboration**
- **Recommend modes and mechanisms for catalyzing partnerships**

STEPS

1

Call To Action

2

Roundtables / Panels / Symposia

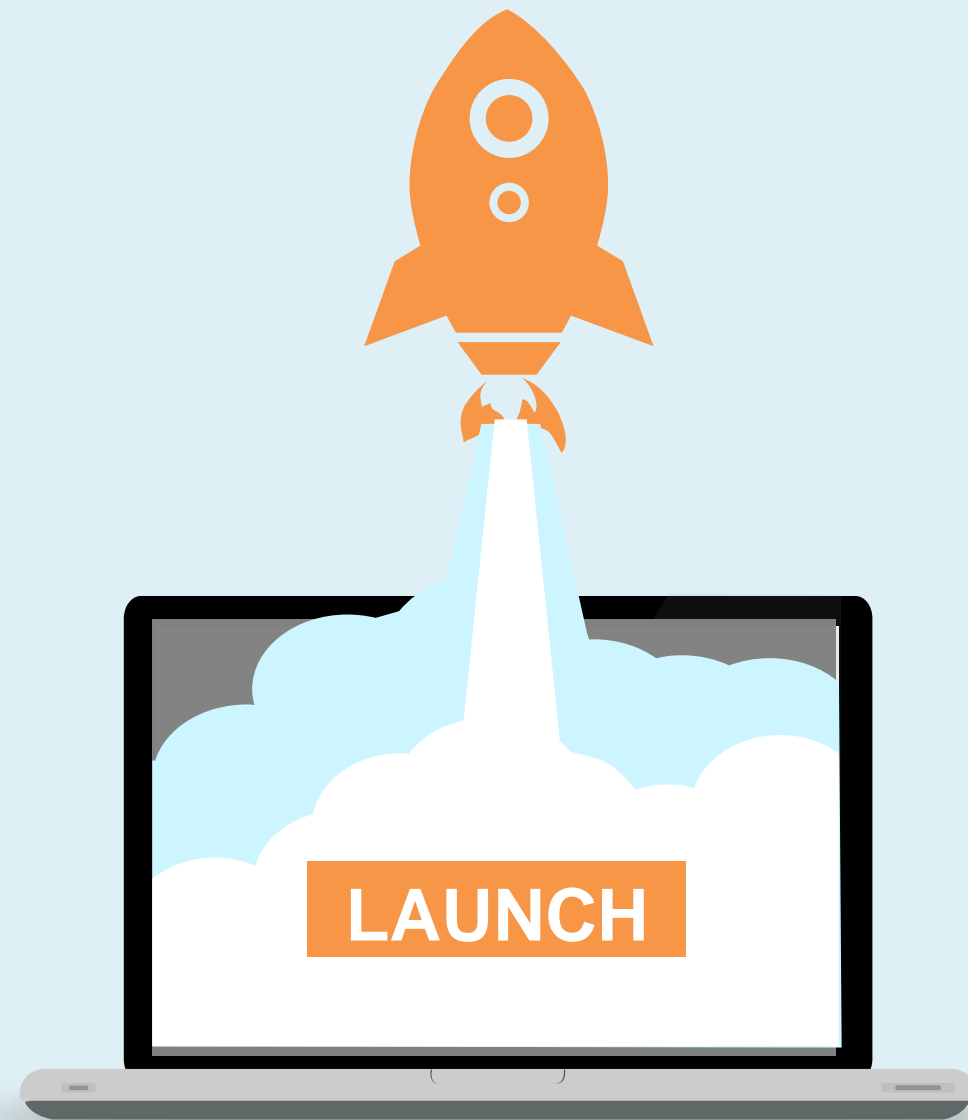
3

Thematic Workshops

4

Deliverables

I. USIAI: LAUNCH



The IUSSTF U.S.-India AI Initiative will begin with a formal “Call to Action”.

II. ROUNDTABLES

**Roundtables/
Panels/Symposia**

**Topics: AI+X (X=
Healthcare, Agriculture,
Smart Cities); Explainable
AI, AGI, Emerging Trends**

Provide an opportunity for individuals / stakeholder groups to:

- Share experiences;
- Identify new R&D areas/opportunities that would benefit from synergistic activities;
- Discuss the emerging AI landscape; and
- Address the challenges of developing an AI Workforce.

Roundtables will primarily serve as an information gathering/scoping exercise.

III(i): THEMATIC WORKSHOPS

WORKSHOP I

**Ethics and Values in AI,
including AI for Social Good**

WORKSHOP II

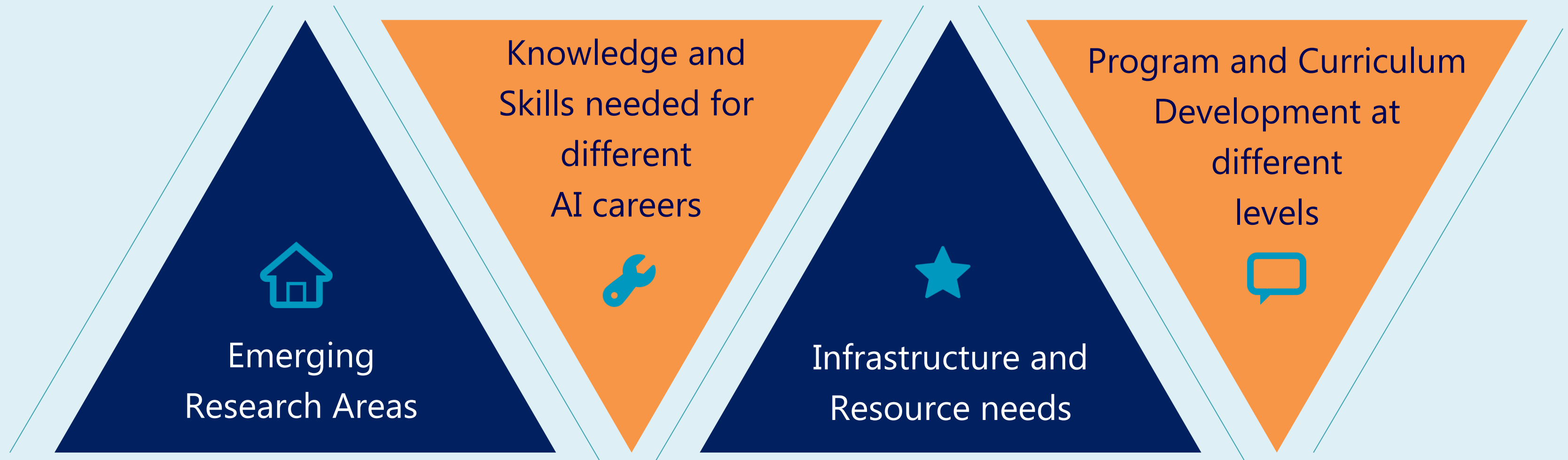
**Data and Computing
Infrastructure**

Translational AI (AI+X)

X=Health Care, Agriculture, Smart Cities,
Education, Energy, Manufacturing, Science &
Engineering Domains

III(ii): AI WORKFORCE SUMMIT

**Leading Academic Institutions with Industry & Government
Representatives to develop a comprehensive roadmap addressing:**



IV. DELIVERABLES

1 REPORTS

Series of white papers and reports, identifying emerging AI research and development areas for collaboration, opportunities for education and training of the AI workforce, collaborations to develop shared research and data infrastructure, and recommendations for potential mechanisms/models to facilitate these partnerships.

2 RESOURCE HUB

An online resource portal for AI-related educational materials, reports, data resources, software and tools. The portal will also serve as a hub to facilitate collaborations among academia, government, and industry.

“AI: Endless possibilities...”

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