

Innovation Challenge on the Theme “Inclusion”

A Pre-Summit Event: Innovation Challenge for AI Impact Summit 2026

**Hosted by: Centre of Excellence in Data Science and Artificial Intelligence,
Thapar Institute of Engineering and Technology, Patiala**

Thapar Institute of Engineering and Technology (TIET) (Website: www.thapar.edu), a leading private university in Patiala, India, has been a pioneer in engineering education and research since its establishment in 1956. It is known for its academic excellence, cutting-edge research, and strong industry collaborations. The institute is consistently ranked among the top engineering colleges and universities in India by the National Institutional Ranking Framework (NIRF) and other international ranking agencies.

The Centre of Excellence in Data Science and Artificial Intelligence ([CoE | DSAI](#)), established in April 2025, is a recent Centre of Excellence in the field of Data Science and AI established at TIET, Patiala, in collaboration with the University of Queensland (UQ), Australia. Its mission is to transform industries and lives through innovation-led data science and AI. The centre focuses on developing high-impact, human-centric AI applications to address real-world challenges in areas like healthcare, agriculture, energy, cybersecurity, and sustainable infrastructure. By hosting the Innovation Challenge for IndiaAI Impact 2026, TIET, through its CoDSAI centre, is poised to drive innovation in inclusive and culturally grounded AI solutions, leveraging its expertise to contribute to a more equitable future.

CoE | DSAI, TIET is keen to participate in IndiaAI Impact 2026 because the event's theme of **"Inclusion"** perfectly aligns with the centre's core mission. The centre is dedicated to developing human-centric AI applications that address real-world problems and transform industries and lives. By hosting the Innovation Challenge, the centre can actively contribute to IndiaAI's vision of creating fair, accessible, and culturally grounded AI solutions. The sub-themes of the challenge, such as AI for financial literacy for rural populations and multilingual accessibility tools, are direct reflections of the centre's commitment to leveraging technology for social good and creating a more equitable future for all.

The CoE | DSAI, TIET, Patiala, is proud to host the **"Innovation Challenge" on the theme "Inclusion,"** a hackathon that serves as a pre-summit event for the prestigious **IndiaAI Impact 2026**. This challenge is dedicated to fostering the development of **Inclusive and Culturally Grounded AI solutions** that are fair, accessible, and respectful of India's rich diversity. Our goal is to leverage the power of Artificial Intelligence to solve real-world problems and create a more equitable future for all.

The Proposed Innovation Challenge seeks AI-based solutions in the following sub-themes under the Inclusion theme:

1. **AI for Financial Literacy to Rural People:** This theme aims to enhance socio-economic development for the rural segment of India. This sub-theme seeks AI solutions like financial literacy chatbots, particularly in their local language, to equip the rural population with the

necessary information to gain access to essential financial services, thereby accelerating social and economic growth.

2. **Multilingual and Multimodal Accessibility Tools:** This sub-theme aims to develop tools that bridge language and sensory gaps (e.g., real-time sign language translation or Braille conversion), enabling technology to be accessible to a wider demographic and empowering individuals with diverse abilities.
3. **AI Tutors for Schools:** Create an AI tutor system that can be deployed in schools with limited access to teachers. The AI could use a conversational interface to answer student questions, provide homework help, and create personalized lesson plans based on a student's performance. This would help supplement traditional teaching methods and provide one-on-one support to students who may otherwise not have access to it.
4. **Bias-Free AI for Recruitment:** The projects in this sub-theme will use AI to remove bias from hiring processes, ensuring fair and equitable employment for all, regardless of background.
5. **AI for Energy Saving:** This sub-theme seeks developers to design data science and AI-based solutions to analyze and reduce a building's energy consumption. The solution may use data from smart meters and provide personalized, actionable recommendations to users for saving energy.
6. **Open Challenge: AI for Inclusion**

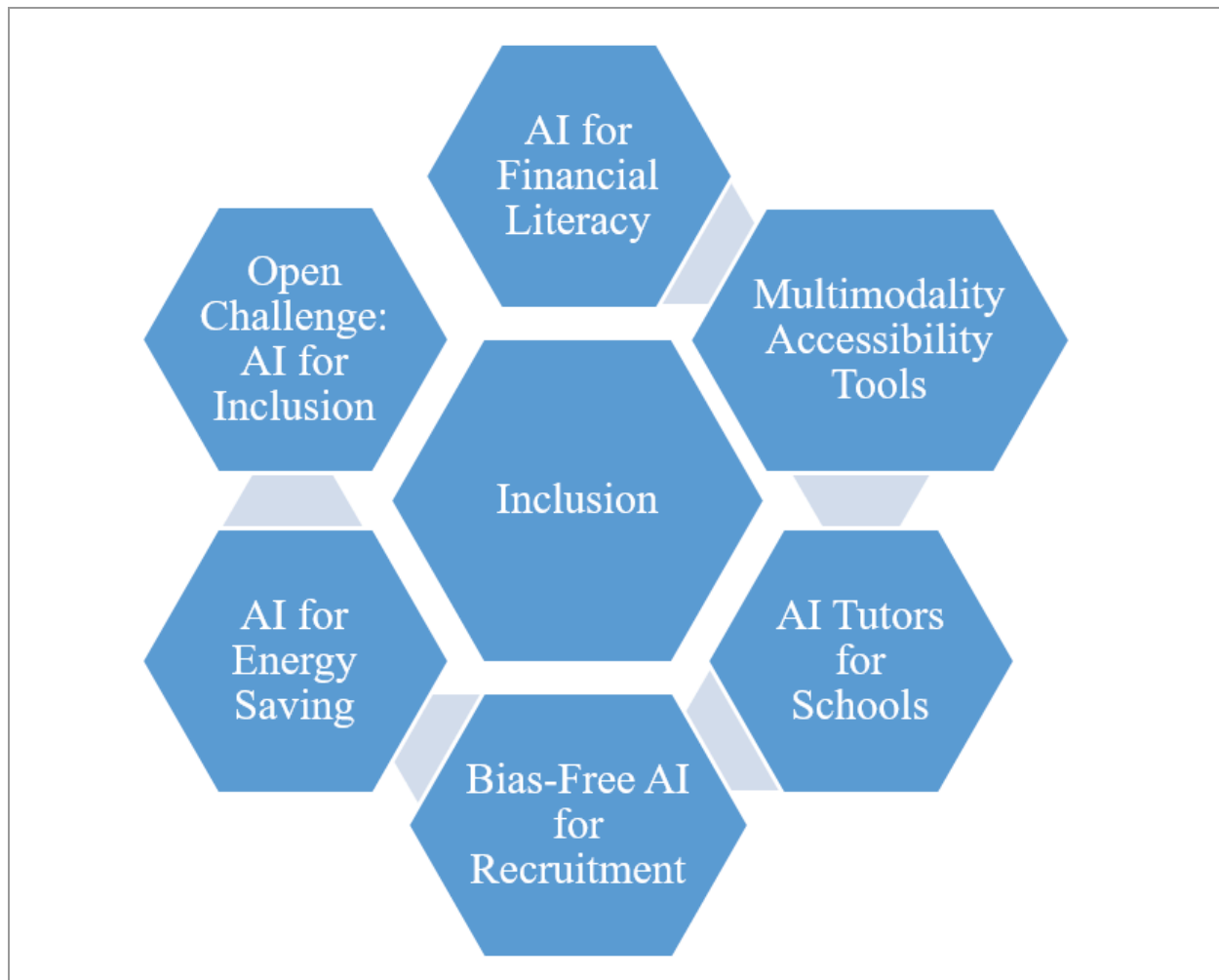


Figure 1: Sub-themes for Innovation Challenge on “AI for Inclusion”

The Proposed TIET-UQ Innovation Challenge in Brief

We invite students and researchers from TIET, Patiala, and the UQ, Australia, to submit their proposals for the "Innovation Challenge," i.e., a hackathon on the theme “Inclusion”. The proposed idea should clearly outline how it aligns with one of the sub-themes and how it embodies the spirit of the IndiaAI Impact 2026 **People, Progress, and Planet** sutras.

The Innovation Challenge Proposal Submission Details to be broadcast to the students at TIET, Patiala, and UQ, Australia:

- **Proposal Format:** A brief document (maximum 3 pages) detailing your team, the problem you are solving, your proposed AI solution, and its direct connection to the hackathon's themes and the IndiaAI mission. The proposal should accompany a short PPT.
- **Submission Deadline:** 20 November 2025 (India), 5 December 2025 (UQ, Australia)
- **Contact for Queries:** coe_dsai@thapar.edu

The Innovations Challenge will comprise two phases. First of all, the problem statements will be floated to students on 6th October 2025, and they will submit their proposal along with a PPT (as per the dates given in Table 1). The shortlisted proposals will do online pitching, and the results will be announced to the proposals qualifying for Phase II.

The selected teams for Phase II will attend an AI hands-on workshop on 17th January 2026. Following the workshop, the teams will start working on their innovation challenge. On 18th January 2026, the innovation challenge will conclude, and the winning teams will be announced and awarded. Figure 2 shows the flow of events in the proposed innovation challenge.

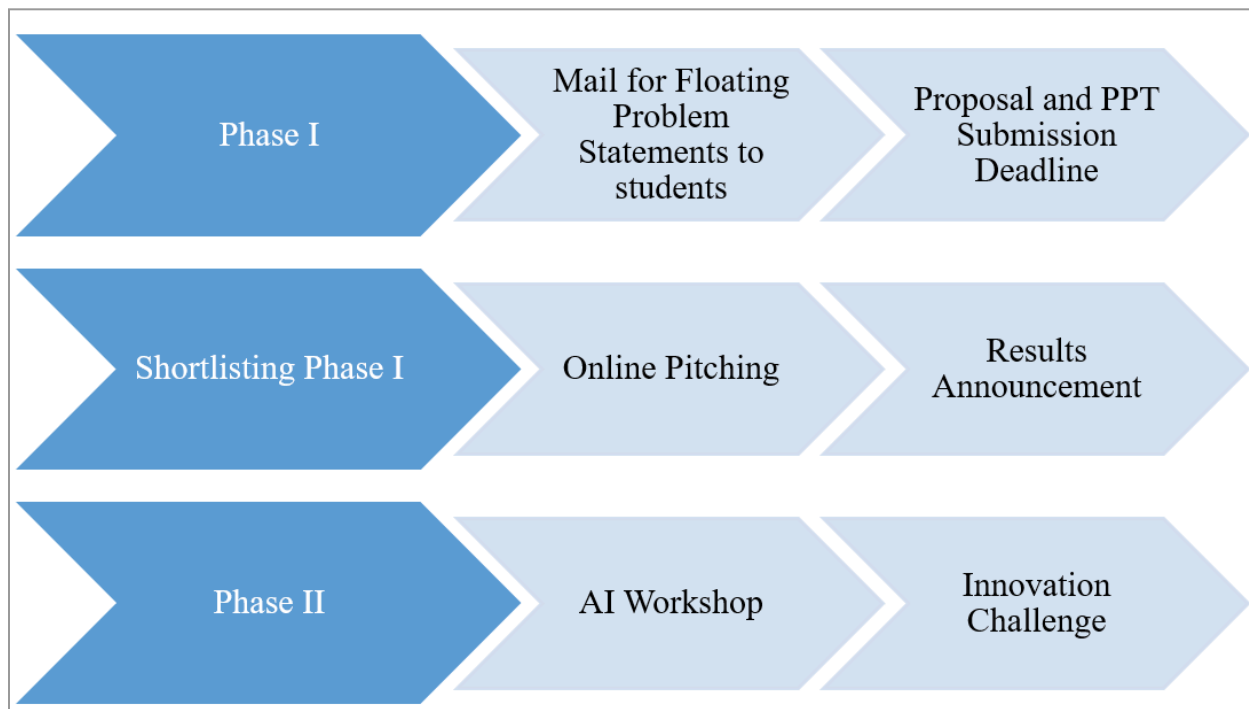


Figure 2: Flow of Events in the Innovation Challenge

The Event Calendar for the Proposed Innovation Challenge is as follows:

S.No.	Item	Dates for India	Proposed Dates for UQ, Australia
1	Mail for Floating Problem Statements to students	06 October 2025	06 October 2025
2	PPT Submission Deadline	20 November 2025	05 December 2025
3	Shortlisting Phase I	01 December 2025	10 December 2025

4	Online Pitching	23 December 2025	04 January 2026
5	Results Announcement	07 January 2026	07 January 2026
6	AI Hands-On Workshop	17 January 2026	17 January 2026
7	Innovation Challenge	17-18 January 2026	17-18 January 2026

Proposed Workshop (17 January 2026) Details

Workshop Topic	Duration (Time is in IST)	Expert Speaker
AI Hands-on Workshop (Topic to be Determined)	1 hour: 11:00 AM to 12:00 PM	Ayush Maheshwari, Senior Solution Architect, NVIDIA
AI Hands-on Workshop (Topic to be Determined)	1 hour: 12:00 PM to 1:00 PM	Prof. Ram Bilas Pachori, IIT Indore

Proposed Hackathon (17-18 January 2026) Details

Sub-theme of AI for Inclusion	Problem Statement	Features
AI for Financial Literacy in Rural Areas	Build an AI-powered chatbot or voice assistant that provides financial education and guidance in local languages	<ul style="list-style-type: none"> Features could include explaining banking terms, helping users understand loans, savings, and investments, or guiding users through government financial schemes. Integrate offline or low-connectivity modes for remote areas
Multilingual and Multimodal Accessibility Tools	Develop AI tools that break language and sensory barriers to make technology accessible to all	<ul style="list-style-type: none"> Real-time sign language translator, Braille conversion apps, text-to-speech in multiple local languages. Use AI to simplify complex text for better understanding by people with cognitive disabilities.

AI Tutors for Schools	Design AI tutors that offer personalized support to students, focusing on weak areas and providing feedback	<ul style="list-style-type: none"> Adaptive learning paths, doubt-solving chatbots, or virtual classroom assistants. Support for multiple languages and real-time performance tracking for teachers and parents
Bias-Free AI for Recruitment	Build AI recruitment tools that ensure fairness by eliminating bias in candidate screening and evaluation.	<ul style="list-style-type: none"> Blind screening, diversity-promoting algorithms, and transparency reports for hiring managers. Tools to assess skills fairly regardless of socioeconomic or cultural background.
AI for Energy Saving	Build an AI system for analyzing and reducing a building's energy consumption through personalized recommendations.	<ul style="list-style-type: none"> Analyze energy consumption data of a building and a recommendation engine to suggest specific actions. Gamification elements to encourage behavioral change to reduce energy wastage.

Mapping the Inclusion Chakra Sub-themes to the Sutras of AI Impact Summit 2026

Our hackathon is structured around the "**Inclusion Chakra**," which embodies the multi-faceted nature of true inclusion. This framework allows us to directly map the **People**, **Progress**, and **Planet** sutras of IndiaAI Impact2026 to our challenge sub-themes, ensuring every project contributes to the national vision.

Mapping of Sub-Themes to AI Impact 2026 Sutras (People, Progress, and Planet)

- AI for Financial Literacy to Rural People:** This sub-theme maps to the **People** and **Progress** sutras. It democratizes AI benefits by equipping the rural population with financial literacy through tools like chatbots in local languages, which directly addresses the People sutra. This, in turn, accelerates social and economic growth, aligning with the Progress sutra.
- Multilingual and Multimodal Accessibility Tools:** This sub-theme primarily maps to the **People** sutra. By bridging language and sensory gaps with tools like real-time sign language or Braille conversion, it makes technology accessible to a wider demographic and empowers individuals with diverse abilities, ensuring AI benefits reach every citizen.
- AI Tutors for Schools:** This sub-theme maps to the **People** and **Progress** sutras. It emphasizes the People sutra by providing personalized, one-on-one support to students in schools with

limited access to teachers, ensuring equitable access to education. This supports the Progress sutra by supplementing traditional teaching and contributing to national development.

4. **Bias-Free AI for Recruitment:** This sub-theme maps to the **People** and **Progress** sutras. It embodies the **People** sutra by using AI to remove bias from hiring processes, ensuring fair and equitable employment for all, regardless of background. This fosters a collective effort in innovation that lifts all segments of society, which is a key part of the Progress sutra.
5. **AI for Energy Saving:** This sub-theme directly maps to the **People, Planet, and Progress** sutras. For the **Planet**, it uses AI to analyze and reduce a building's energy consumption, leading to lower carbon emissions. For **People**, it provides personalized recommendations that help reduce electricity bills, making energy more affordable. The theme represents **Progress** by leveraging AI to drive innovation and create a sustainable, technology-driven solution by including people to address a global challenge.
6. **Open Challenge: AI for Inclusion:** This sub-theme is to encourage students to think out-of-the-box and propose solutions beyond the listed sub-themes. The selected AI solutions from open challenge would ofcourse map to People, Progress and Planet sutras, which will be defined in their proposal.

Speakers for Workshop on Hands-on AI

1. **Ayush Maheshwari, Senior Solution Architect, NVIDIA, India**
2. **Ram Bilas Pachori, Professor, IIT Indore, India**