GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY

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UNSTARRED QUESTION NO. 4243

TO BE ANSWERED ON: 26.03.2025

DEEP TECH STARTUPS

4243. SHRI B K PARTHASARATHI:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) the total number of deep tech start ups registered in the country, location-wise;
- (b) the total number of deep tech start ups financed under the Start up Financing Pillar of India AI Mission, location-wise;
- (c) the amount of funds sanctioned and released for the assisted start ups, start up-wise;
- (d) the details regarding the type of interventions, the assisted start ups are seeking to develop, start up-wise;
- (e) the number of industry-led AI projects approved under India AI Mission, location-wise; and (f) the type of social impact envisaged by the assisted industry-led projects, project-wise?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY (SHRI JITIN PRASADA)

(a) to (e): The Government of India has been supporting startups in all sectors with the launch of Startup India Mission. Under the mission a total of **1,67,001** are registered with the Department for Promotion of Industry and Internal Trade (DPIIT) of which **2,388** startups are registered as AI startups. The details are available at https://www.startupindia.gov.in/.

Under IndiaAI Mission, startups are being supported for **building Foundation Models**, **AI Applications and Safe & Trusted tools**.

IndiaAI Applications Development Initiative:

- IndiaAI Application Development Initiative aims to develop, scale, and promote the adoption of impactful AI solutions to effectively tackle significant problem statements.
- IndiaAI Innovation challenge was launched on 13th August 2024 for the themes of healthcare, agriculture, improved governance, climate change & disaster management and assistive technologies for learning disabilities. The Innovation Challenge was open to Indian innovators, startups, non-profits, students, academic/R&D organizations, and companies. A total of 900 applications have been received across the five focus areas by the deadline of 30th September. Following a rigorous evaluation process, 30 AI solutions have been shortlisted for the next stage across three stages of maturity: Idea, Prototype, and Existing Solutions. The AI solutions at idea stage have been supported by Rs. 5 Lakh and the solutions at prototype & solution stage have been supported by Rs. 25 Lakh. The details of shortlisted AI solutions are given at Appendix I.
- CyberGuard AI Hackathon was launched on 17th October 2024 for Cybercrime prevention in collaboration with the Indian Cybercrime Coordination Centre (I4C) and in response 263 responses have been received. Shortlisted 20 teams have participated in 3 days hackathon. Currently, top 3 teams are being evaluated.

Safe & Trusted AI:

- This pillar enables the implementation of Responsible AI projects including the development of indigenous tools and frameworks, self-assessment checklists for innovators, and other guidelines and governance frameworks.
- Eight Responsible AI Projects have been selected to address the need for robust guardrails to ensure the responsible development, deployment, and adoption of AI technologies. The projects cover a range of critical themes, including Machine Unlearning, Synthetic Data Generation, AI Bias Mitigation, Ethical AI Frameworks, Privacy-Enhancing Tools, Explainable AI, AI Governance Testing, and Algorithm Auditing Tools. The details of the selected projects are given at Appendix II.
- Expressions of Interest have been invited for responsible AI projects in the themes such as Watermarking & Labelling, Ethical AI Frameworks, AI Risk Assessment & Management, Stress Testing Tools, and Deepfake Detection Tools to ensure the responsible development, deployment, and adoption of AI technologies. A total of 420 proposals have been received.

IndiaAI Innovation Centre:

- IndiaAI Innovation Centre aims to develop and deploy indigenous Large Multimodal Models (LMMs) trained on India-specific data
- A Call for Proposals has been launched under this pillar to support the development of foundational AI models, inviting startups, researchers, and entrepreneurs to collaborate on creating state-of-the-art AI models using Indian datasets. This initiative aims to establish indigenous AI models, which can be Large Multimodal Models, Large Language Models (LLM), or Small Language Models (SLM), to address India-specific challenges across various sectors. A total of 67 proposals aimed at building India's foundation models, with contributions from both established startups and new teams of researchers & academia have been received till February 15.

In addition, the details of other pillars of IndiaAI Mission are as follows:

IndiaAI Compute:

- IndiaAI compute pillar envisions building a high-end scalable AI computing ecosystem comprising AI compute infrastructure of 10,000 or more Graphics Processing Units (GPUs)
- Applications were invited for Empanelment of Agencies for providing AI services on Cloud on 16th August 2024. The bid submission was closed on 28th November 2024 and 19 bidders have submitted bids in response to the request out of which 10 bidders were qualified for financial bid opening.
- Against the target of 10,000 GPUs outlined in the IndiaAI compute pillar, **14,461 GPUs** are already installed and are available for immediate use.
- The prices quoted by the bidders are highly competitive and average discount from market prices for all GPUs is 42 %. Average discount from market prices for higher precision GPUs it is 47%. Average rate per GPU is ₹115.85/hour and Average rate per Higher precision GPU is ₹150/hour.
- To keep pace with the changes in technologies, IndiaAI enabled a continuous empanelment process inviting fresh proposals from the empaneled agencies for onboarding new GPUs and discovering any revised rates.

IndiaAI FutureSkills:

- IndiaAI FutureSkills Pillar envisions to augment the number of graduates, post-graduate and PhDs in AI domain. Further, it envisions setting up Data and AI Labs in Tier 2 and Tier 3 cities across India, to impart foundational-level courses in Data and AI.
- IndiaAI Fellowships are awarded to students pursuing relevant undergraduate and postgraduate programs at Private or Centrally Funded Technical Institutes (CFTIs) recognized by AICTE, NBA, NAAC, or UGC. So far, **150 undergraduate students**, **48 postgraduate students**, and **3 PhD scholars** have been selected for the fellowship.
- A model IndiaAI Data Lab in the National Institute of Electronics & Information Technology (NIELIT's), Delhi has been set up, which acts as a reference point for the infrastructure to be set up in Tier 2 and Tier 3 cities as a part of the initiative.

• All the 36 States and Union Territories (UTs) have been requested to submit their nominated list of Industrial Training Institutes (ITIs)/Polytechnics located in Tier 2 and Tier 3 cities for setting up of Data Labs. Additionally, IndiaAI in collaboration with NIELIT plans to establish 27 data labs in Tier 2 and Tier 3 cities across the country, details of which are placed at **Appendix III.**

IndiaAI Datasets Platform:

- The IndiaAI Datasets Platform (IDP) seeks to enhance access, quality, and utilization of public sector datasets to make them AI-ready. The IDP aims to function as a unified data platform, integrating datasets from all existing data platforms as well as onboarding non-government data contributors and providing new-age AI-centric features
- To provide a unified portal for seamless access to datasets, tools and AI models, AIKosh: IndiaAI Datasets Platform has been launched. AIKosh is a secured platform that provides a repository of datasets, models and use cases to enable AI innovation. It also features AI sandbox capabilities through an integrated development environment along with tools and tutorials. The platform is equipped with the features like content discoverability, AI readiness scoring of datasets, permission-based access & security mechanisms like data encryption at rest and in motion, secure API, and firewalls for real-time filtering of malicious traffic.
- At present the platform offers a comprehensive collection of resources for AI development, featuring over **300 datasets** sourced from more than 10 entities across 12 sectors. It also includes more than **150 AI models** provided by 5 different entities, alongside a library of over 5 use cases that demonstrate potential applications using the available datasets and models. Additionally, the platform provides over **10 toolkits** comprising development utilities for project integration, as well as tutorials to help users understand and navigate its features.

IndiaAI Startup Financing:

- IndiaAI Startup Financing pillar is to provide support to AI startups at all stages. Multiple rounds of stakeholder consultations have been held to deliberate on the scheme for supporting AI Startups at Pre-Seed, Seed and Growth stage.
- In collaboration with STATION F and HEC Paris, the IndiaAI Mission has launched an **acceleration program** for Indian AI startups. This four-month immersive program (1 month online, 3 months onsite at STATION F in Paris) at the world's largest startup campus will provide 10 selected AI startups with access to mentorship, networking, and global market expansion opportunities in Europe. A total of **143 applications** have been received from Indian startups for participation in the acceleration program.

The details of shortlisted AI solution under IndiaAI Application Development Initiative are as under:

Sl.No.	Name of the Solution	Solution Description	Stage	Team Name	Theme
1	Promoting regenerative agriculture practices for a sustainable future using AI	In-house developed MRV (Measurement, Reporting, and Verification) technology designed to ensure the integrity and quality of generated carbon credits.	Solution	Varaha ClimateAG Private Limited	Agriculture
2	Krishi SahʻAI'yak - Farming Co-pilot	AI-powered conversational co- pilot to provide personalized advisory to farmers in Indic languages	Solution	Samagra Development Associates Pvt. Ltd	Agriculture
3	Kadalcompass - We Amplify the voice of water using Hydro- AI,Underwater com,IoUT with Sensor Network	5G-enabled device that transforms fishing practices using AI, IoUT, and advanced communication technologies	Solution	Innogle Technologies Pvt LTD	Agriculture
4	KissanCopilot Multilingual Multimodal personalized AI Assistant for small holder farmers	Powered by Dhenu's vertical LLM for agriculture, provides personalized agricultural advisory services to smallholder farmers.	Solution	Titodi Infotech Pvt Ltd	Agriculture
5	Rapid, chemical-free soil testing solution using NIR Spectroscopy & AI/ML models	End-to-end soil testing approach leverages an offline app, AI-powered spectral device, and ML models to deliver timely, chemical-free soil analysis.	Solution	Neoperk Technologies	Agriculture
6	AI deep-tech driven quality assessment of Maize	SAAS platform to provide objective quality assessment of maize including price estimation & sales pipelining.	Solution	RootsGoods (OPC) Pvt. Ltd.	Agriculture

Sl.No.	Name of the Solution	Solution Description	Stage	Team Name	Theme
7	AI-Driven Live Fish Logistics and Mortality Reduction in Aquaculture	AI-driven solution that optimizes aquaculture operations	Solution	Shuvoneel Ras System Pvt. Ltd.	Agriculture
8	QScan	AI-powered IoT solution that captures critical data throughout the fresh produce lifecycle, providing real-time analysis of food quality and actionable insights to sellers.	Prototype	Qzense Labs Pvt Ltd	Agriculture
9	Heatwave Resilience: Integrating AI-based Advanced Forecasting for Extreme Heat Events	Integrates AI-based climate forecasting with health data to develop a targeted risk classification system for heathealth impacts	Idea	I-Hub for Robotics and Autonomous Systems Innovation Foundation	Climate
10	Multi-Hazard Susceptibility Mapping	hazard management system topredict Landslides, Debris Flows and Flash Floods	Prototype	Jarbits Pvt Ltd	Climate
11	DeepFlood: Rapid flood inundation mapping using Vision Transformers and Satellite Data	Advanced flood inundation mapping tool using SAR data and deep learning models for realtime, automated flood detection	Prototype	Indian Institute of Technology Delhi	Climate
12	Moskeet: Climate impact on mosquito-borne diseases	AI-powered platform integrates real-time climate data with mosquito tracking to predict and prevent disease outbreaks.	Prototype	Moskeet AI	Climate
13	End to End AI Cloud Platform for Radiology Diagnosis	AI cloud platform for radiology diagnosis, integrating innovative technologies such as CV, GenAI, NLP, Dicom, mobile, and cloud computing	Solution	Endimension Technology Pvt. Ltd.	Healthcare
14	NIDAAN (iNtegrated lung health screening & tuberculosIs	qXR, an advanced AI tool for interpreting chest X- rays (CXR), detects	Solution	Qure.ai Technologies Pvt. Ltd.	Healthcare

Sl.No.	Name of the Solution	Solution Description	Stage	Team Name	Theme
	Detection through Ai At National scale)	& localizes 30+ findings.			
15	Impactful AI solution, preventing preventable blindness, for socioeconomic transformation.	early detection of vision threatening retinal abnormalities	Solution	Artelus	Healthcare
16	AI Powered Wearable Technology for Detection & Diagnosis of Musculoskeletal Joint Health Pain.	AI Enabled Hardware Platform for Joint Pain Diagnostics and Rehabilitation Segments of Healthcare	Solution	Startoon Labs Private Limited	Healthcare
17	VoxelBox	Neuro-informatics platform that allows to map the functional maps / connectomics of the human brain	Prototype	BrainSight Technology Pvt Ltd	Healthcare
18	Development of Ocellux: An AI- Based Solution for Enhanced Early Diabetic Eye Screening in INDIA.	Portable, affordable and highly accessible retina imaging device powered by AI for early detection of eye diseases like Diabetic Retinopathy, AMD & Glaucoma	Prototype	Anself Dynamics Pvt. Ltd.	Healthcare
19	Revolutionizing healthcare using doctor-led AI	AI-powered personal doctor available 24x7 and free of cost, designed to assist people when they are sick, monitor their health through wearables, and act as a health coach to prevent diseases.	Prototype	Jivi Health Pvt. Ltd.	Healthcare
20	AI/ML enabled MafPro device platform for cancer staging, localization, and margins.	MafPro handheld detector provides a radiation-free, non- invasive, safe and cost-effective solution that can reliably detect and adequately evaluate metastases in lymph	Prototype	SIAMAF Healthcare	Healthcare

Sl.No.	Name of the Solution	Solution Description	Stage	Team Name	Theme
		nodes using AI/ML based algorithms			
21	Readabled (Online Dyslexia Training)	web-based application designed to help children with dyslexia improve phonetic awareness through interactive exercises.	Existing	Hermit Labs Pvt. Ltd.	Learning disabilities
22	Voice fusion AI	AI application to provide assistive support to individuals with SLDs in multiple Indian languages	Prototype	PerpetualBlock Technologies Private Limited	Learning disabilities
23	ScreenPlay - a digital game based screening tool for autism and related disorders.	Digital, game-based screening tool designed to identify children aged 3 to 6 who may be at risk for autism or related developmental conditions	Existing	Kidaura Innovations Pvt Ltd	Learning disabilities
24	Jiveesha	AI-powered diagnostic platform for early detection of SLDs	Idea	Daira Edtech Private Limited	Learning disabilities
25	Adaptive Learning and Detection for SLDs	d Detection for Disabilities (SLDs)		Narottam Innovations Pvt. Ltd.	Learning disabilities
26	Special Educator AI	AI-driven system designed to address India's shortage of special educators and support children with SLDs.	Idea	Banyan Intelligence Private Limited	Learning disabilities
27	ConvoZen.AI by NoBroker Technologies	AI-powered conversational platform that automates customer engagement across channels like chat, voice, email, and social media, offering fast, personalized, and multilingual support.	Solution	Nobroker Technologies Solutions Pvt. Ltd	Governance

Sl.No.	Name of the Solution	Solution Description	Stage	Team Name	Theme
28	AI contact center	AI-powered technologies like machine translation, NLP, ASR and TTS, and multilingual voice recognition to enhance governance by improving communication and accessibility across India's linguistic diversity	Solution	Devnagri AI Pvt. Ltd	Governance
29	Adalat AI: AI solutions for Courts	AI-powered platform provides real-time multilingual transcription, translation, live case flow management, and WhatsApp chatbots to streamline courtroom operations	Prototype	Legsys.AI Technology Foundation	Governance
30	Gov.Civis.Vote	AI-powered Digital Public Infrastructure designed to transform public consultations in India by making citizen engagement more inclusive, scalable, and comprehensive	Solution	Civic Innovation Foundation	Governance

APPENDIX II

The details of the selected projects under "Safe & Trusted AI" Pillar are as under:

NAME OF THE	SELECTED APPLICANT	TITLE OF THE PROJECT
THEME		
Machine Unlearning	IIT Jodhpur	Machine Unlearning in Generative Foundation Models
Synthetic Data Generation	IIT Roorkee	Design and Development of Method for Generating Synthetic Data for Mitigating Bias in Datasets; and Framework for Mitigating Bias in Machine Learning Pipeline for Responsible AI
AI Bias Mitigation Strategy	National Institute of Technology Raipur	Development of Responsible Artificial Intelligence for Bias Mitigation in Health Care Systems
Explainable AI Framework	DIAT Pune and Mindgraph Technology Pvt. Ltd.	Enabling Explainable and Privacy Preserving AI for Security
Privacy Enhancing Strategy	IIT Delhi, IIIT Delhi, IIT Dharwad and Telecommunication Engineering Center (TEC)	Robust Privacy-Preserving Machine Learning Models
AI Ethical Certification Framework	IIIT Delhi and Telecommunication Engineering Center (TEC)	Tools for assessing fairness of AI model
AI Algorithm Auditing Tool	Civic Data Labs Pvt. Ltd.	ParakhAI - An open-source framework and toolkit for Participatory Algorithmic Auditing
AI Governance Testing Framework	Amrita Vishwa Vidyapeetham and Telecommunication Engineering Center (TEC)	Track-LLM, Transparency, Risk Assessment, Context & Knowledge for Large Language Models

S.No.	NIELIT Centre	State/UT
1	Gorakhpur	Uttar Pradesh
2	Lucknow	Uttar Pradesh
3	Shimla	Himachal Pradesh
4	Aurangabad	Maharashtra
5	Patna	Bihar
6	Buxar	Bihar
7	Muzaffarpur	Bihar
8	Kurukshetra	Haryana
9	Ropar	Punjab
10	Haridwar	Uttarakhand
11	Bikaner	Rajasthan
12	Tezpur	Assam
13	Bhubaneswar	Odisha
14	Calicut	Kerala
15	Guwahati	Assam
16	Itanagar	Arunachal Pradesh
17	Srinagar	J&K
18	Jammu	J&K
19	Ranchi	Jharkhand
20	Imphal	Manipur
21	Gangtok	Sikkim
22	Agartala	Tripura
23	Aizawl	Mizoram
24	Shillong	Meghalaya
25	Kohima	Nagaland
26	Leh	Ladakh

27	Silchar	Assam
