IndiaAl and the Geological Survey of India (GSI), Ministry of Mines, launched the IndiaAl Hackathon to revolutionize Al-driven mineral targeting

Encouraging AI and ML solutions for identification of new potential areas for exploration of critical minerals like REE, Ni-PGE, and copper, as well as other commodities like diamond, iron, manganese, and gold

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In a groundbreaking move to modernize mineral targeting in India, IndiaAI, an Independent Business Division (IBD) under Digital India Corporation (DIC), Ministry of Electronics & IT (MeitY), in collaboration with the Geological Survey of India (GSI), Ministry of Mines, has launched the IndiaAI Hackathon on Mineral Targeting.

The initiative is aimed at leveraging AI and ML technologies to enhance mineral discovery and geological analysis. Participants will use multi-parametric geoscience datasets, including geology, geophysics, geochemistry, remote sensing, and borehole data, to identify concealed and deep-seated ore bodies. The hackathon aims to:

- 1. Identification of new potential areas for exploration of critical minerals like REE, Ni-PGE, and copper, as well as other commodities like diamond, iron, manganese, and gold within a predefined 39,000 sq. km area in the states of Karnataka and Andhra Pradesh, India.
- 2. Emphasis on locating unrevealed & deep-seated mineralised bodies with depth modelling.
- 3. Developing AI/ML algorithms for data cleaning, integration, modelling, and validation.
- 4. Generation of mineral predictive maps showing exploration targets visualised through maps, sections, etc.

Exciting prizes for Hackathon Winners

The hackathon is open to Startups & Companies; Academic & Research Institutions; Autonomous bodies, including public sector organizations; students or researchers associated with educational institutions, or working professionals can participate in their individual capacity or as teams. The prize money for the hackathon is as follows.

• First Prize: ₹10 Lakh • Second Prize: ₹7 Lakh • Third Prize: ₹5 Lakh

• Special Prize of INR 5 lakhs for All-Women Teams (if no women team in top 3) This initiative aligns with the Government of India's vision of leveraging AI for inclusive growth and responsible development of AI. For more details and to apply, visit https://indiaai.gov.in/article/ai-formineral-targeting-join-the-indiaai-hackathon-on-mineral-discovery. The last date for submission is May 12, 2025.

Significance of the Hackathon

This initiative aligns with IndiaAI's mission to democratize AI adoption in critical sectors, fostering technological self-reliance and responsible use of AI. By applying AI to mineral targeting, the government aims to improve discovery, efficiency and strengthen India's mining sector while ensuring sustainable mineral exploration.

For further details, visit indiaai.gov.in.

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