

PRITHVI'26

ORGANIZES

GEOSCIENCE



HACKATHON

IN COLLABORATION WITH



Rezlytix[®]

A 10-Day Cloud-Based Hackathon focused on developing self-supervised machine learning algorithms to detect faults in 3D seismic data without manual labels.

Participants will work on real seismic datasets using GPU-enabled cloud environment provided by organizers.

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OBJECTIVE

- *Build self-supervised / unsupervised ML models*
- *Detect geological faults in 3D seismic volumes*
- *Ensure reproducible and efficient pipeline*
- *Solve real industry-level geoscience problem*

DURATION & TIMELINE

- *Day 0 – Kickoff & VM Access*
- *Day 1–7 – Model Development*
- *Day 8 – Optimization*
- *Day 9 – Final Packaging*
- *Day 10 – Final Submission*

Final evaluation after submission using hidden dataset.

FACILITIES PROVIDED

- *GPU Enabled Cloud VM*
- *Public 3D Seismic Data*
- *AWS Data Access*
- *Python / PyTorch / TensorFlow Environment*
- *Starter Notebook & Utilities*

TEAM RULES

- *Team size: 1 – 3 members*
- *Code must be written during event*
- *No labeled seismic dataset allowed*
- *Submission must run without internet*
- *Respect cloud usage rules*

SUBMISSION REQUIREMENTS

- *Submit a packaged archive containing:*
- *Inference Notebook*
- *Model Files*
- *Source Code*
- *Config File*
- *Report / Documentation*

ZIP / TAR submission only GitHub links not accepted

EVALUATION CRITERIA

Final Score based on:

- *Model Performance – 80%*
- *Engineering Quality – 20%*

Live Leaderboard + Final Leaderboard
Max 3 submissions per day per team

AWARDS & RECOGNITION

- *Prizes for Top Teams*
- *Engineering Excellence Award*
- *Certificates for Participants*
- *Opportunity for Research / R&D Collaboration*