



Call for team registration for student hackathon on

Geospatial Technology for Sustainable Development (GTSD - 2023)

(April 28-30, 2023, IIIT Bangalore)

Organized by

IEEE GRSS Bangalore Section

In-person Event

The call for the IEEE/GRSS students who are pursuing UG/PG/PhD/Post-docs/ Research scholars in any discipline are interested in recent advancements in remote sensing, GIS, Python coding and applying artificial intelligence/machine learning techniques for remote sensing applications! Grab the opportunity to be a part of the exclusive student hackathon on “Geospatial Technology for Sustainable Development”, stand a chance to win an incredible prize.

Objectives of the student hackathon:

- Capability building among students for Geosciences and Remote Sensing Applications
- Python coding and Google earth engine (GEE) skill development among students for real time geospatial analysis involving societal challenges, solutions to climate change, urbanization, clean water etc.
- Create awareness on sustainable development goals (SDGs)

About student hackathon:

The student hackathon will be a team event consisting of a minimum of 1 member or a maximum of 3 members. We encourage IEEE GRSS members to participate but the hackathon is open to all. Team members may belong to different disciplines/streams but have to be from the same institute. There are 5 research tracks in the student hackathon.



Research tracks:

1. Clean water and sanitation - water quality, integrated water management (SDG #6)
2. Affordable clean energy - energy deficiency, renewable energy (SDG #7)
3. Sustainable cities and infrastructure - urban sprawl detection/urbanization challenges using GIS and remote sensing (SDG #9 #11)
4. Climate action - urban flood, forest fire, wind speed, drought, ecology and forest fragmentation (SDG #13)
5. Disaster management applications and land utilization/planning (SDG #15)

Registration fee: NIL

Register here : <https://forms.gle/uFgMfdGideZxNXZP6>

Research team size: Student team comprises minimum 1 and maximum 3 members.

Important dates:

- Registration open: April 12, 2023
- Last date for registration of research team: April 25, 2023 at 5:00 pm IST
- Release of problem statement with dataset: April 28, 2023
- Submission of research report result from each team: April 29, 2023 at 8:00 pm IST
- Jury evaluation, expert lecture and announcement of winners of student hackathon: April 30, 2023

Note: Guidelines shall be circulated soon.



Hackathon Day 1 (Friday, 28th April)

The program at IIIT Bangalore starts at 9:00 AM and ends at 5 PM. Participants should bring laptops and chargers for hands-on tutorials preparing them for the hackathon. Teams will receive topics and guidelines by the end of the day, with 24 hours to work on their hackathon thereafter.

Certificate and Prize

E- Certificate of participation will be given to each member of the research team.

In each track, the best research team will receive a Cash prize (as Amazon Vouchers) of INR. 6,000 (1st prize), 3,000 (2nd prize) and 1,500 (3rd prize) per team.

Please feel free to contact us for any inquiries: ieeegrss.blr@gmail.com with the subject “IEEE Hackathon GTSD – 2023”

Organizing Team

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IEEE GRSS Hackathon Competition 2023
28-30 April, 2023, IIT Bangalore

SCHEDULE

| Day and mode | Time (hrs) | Session details | Speaker |
|--|-------------------|---|--------------------------------|
| Day – 1, Friday, Offline, IIT BLR | 9:30 – 10:00 | Introduction about IEEE GRSS Bangalore Chapter and Hackathon (Announcement of topics) | Dr. Jaya Sreevalsan Nair + TBA |
| | 10:00-10:15 | Tea | |
| | 10:15-11:15 | QGIS | TBA |
| | 11:15 -12:15 | Github | TBA |
| | 12:15-13:15 | GEE | TBA |
| | 13:15-14:30 | Lunch | |
| | 14:30- 15:30 | Geo-python | TBA |
| | 15:30- 16:30 | Kept reserve for additional session | TBA |
| Day – 2, Saturday Online | -- | Participants will work online | -- |
| Day – 3, Sunday, Offline, IIT BLR | 09:00-10:00 | Demonstration of results by participants to jury members | Jury members: TBA |
| | 10:00-10:15 | Tea | |
| | 10:15-11:15 | Expert talk – 1 | TBA |
| | 11:15-12:15 | Expert talk – 2 | TBA |
| | 12:15-13:00 | Valedictory ceremony | |
| | 13:00-14:00 | Lunch and networking | |