EO Onboard Edge AI Models Grand Challenge

(March 23- April 21, 2024, SkyServe)
Organized by
IEEE GRSS Bangalore Section

The call for the IEEE/GRSS students who are pursuing UG/PG/PhD/Post-docs/ research scholars or are professional with less than 10 years of experience in any discipline who 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 grand challenge on "EO Onboard Edge AI Models Grand Challenge ", stand a chance to win incredible prizes.

Objectives of the grand challenge

1. Capability building among Young Professional for Geosciences and Remote Sensing Applications.
2. Ideate use cases/applications for models that could be deployed on the edge.
3. Familiarity with Edge-computing and onboard processing of satellite imagery for energy & utilities, oil & gas, agriculture, climate, national security etc.
4. Python coding and Machine Learning skill development.

About the grand challenge

The task of this grand challenge is to develop solutions and use-cases along with an AI model for deploying onboard the edge. The challenge will be a team event consisting of a minimum of 1 member or a maximum of 4 members. We encourage IEEE GRSS members to participate but the hackathon is open to all. Team members may belong to different disciplines/streams.

Important Dates

Registration opens: March 20, 2024
Educational Webinar: 4 PM onwards, March 23, 2024 (virtual)
Registration closes: April 5, 2024
Evaluation of presentation: 4 PM onwards, April 6, 2024 (virtual)
Hackathon on 21th April - 9 AM till 7 PM (virtual)

Agenda

Date	Day and Mode	Time (hrs)	Remarks	Speaker
March 23, 2024	virtual	16:00	Introduction to Edge Computing	Aditya
April 6	virtual	16:00	Evaluation of presentation	
Apr 6 - Apr 21	virtual	-	Development of use-case	
April 21	Live hackathon	9:00 - 19:00	Hackathon and evaluation	

Certificate and Prize

1st Prize: 15,000/-
2nd Prize: 10,000/-
3rd Prize: 5,000/-
E- Certificate of participation will be given to each member of the team.

Registration form

https://forms.gle/W1RBrXRsFW1ckRPg8

Organizing team

SkyServe, Bengaluru (Email: goutam@skyserve.ai)
Let's Talk Spatial, Bengaluru (Email: amanbagrecha.blr@gmail.com)

About **SkyServe**
SkyServe's in-space edge computing platform allows classical GIS or GeoAI models/apps to be deployed onboard EO satellites to instantly derive insights directly from space in near real-time. The SkyServe platform can be leveraged for all and any applications that need continuous and frequent monitoring including energy & utilities, oil & gas, agriculture, climate, national security, etc. It serves best in use cases that demand low latency for rapid response e.g. disaster management (fires, floods, gas leaks, etc.) and defense surveillance.
To serve the variety of user needs, SkyServe's MLOps tool enables testing of GeoAI models for their ability to run with the software and hardware constraints of the edge computing environment. This self-serve sandbox tool allows the developers to submit their models, seek feedback, and seamlessly iterate to versions compatible to be deployed in space.

About **Let's talk Spatial**
A Geospatial community in Bengaluru interested in remote sensing, GIS, maps and the tech behind it all. Founded in 2022, it has conducted over 15 events, with 1 event every month. Join us to share your experience in everything spatial.