RES-NRSC-2022-012

Name of ISRO Centre/Unit

National Remote Sensing Centre, Hyderabad

Title of the research proposal

Web GIS and Data Dissemination for geoportal applications and services

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Area of Research

Geospatial Web Applications and analytics

Summary of the proposed research and expected deliverables

GIS today encompasses many critical aspects of geospatial data dissemination, including metadata information, geospatial web services, information retrieval, automated discovery, geotagging, geospatial data sharing and interoperability. Data dissemination was always a significant activity in all types of ISRO Operational Programmes and its legislative framework has to be continuously updated with new regulations and decisions. The objectives of the research shall focus on the development of Web-GIS tools to support decision making and also provide various data and information to the scientific community interested in natural resource applications. Some of the applications to be addressed are Augmented Reality, Real-time geospatial intelligence, Indoor Mapping with Wi-Fi/ Bluetooth, Passive GIS sync with Social media. Sensor Web with Uniform Resource identifier, Open source data centre computing. Geo intelligence of crowd sourced information, Trend Analysis on Time series thematic data.

Scope of the Work:

Development of Web-GIS tools to support decision making and also provide various data and information to the scientific community interested in natural resource and Disaster related applications.

Deliverables:

Geospatial Web Application Framework having capabilities to do trend analysis on Time Series thematic data, Geo-intelligence of crowd sourced data, Real-time geospatial intelligence, Passive GIS sync with Social media in a simple web browser with low bandwidth.