Report on

135- IIRS ISRO Outreach Programme

on

"Geospatial Analysis using Google Earth Engine" (Human Resource Development Center, Integral University, Lucknow) February 19-23, 2024

Human Resource Development Centre (HRDC), Integral University Lucknow is one of the Nodal Center of Indian Institute of Remote Sensing (IIRS), Indian Space Research Organization (ISRO), Department of Space, Govt. of India, Dehradun, India. HRDC had successfully organized the 135- IIRS ISRO Outreach Programme on "Geospatial Analysis using Google Earth Engine" from February 19-23, 2024 for working professionals and students in association with IIRS, ISRO.

Indian Institute of Remote Sensing under Indian Space Research Organization (ISRO) is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geo Informatics and GNSS Technology for Natural Resources, Environmental and Disaster Management. Formerly known as Indian Photo-interpretation Institute (IPI), founded in 1966, the Institute boasts to be the first of its kind in entire South-East Asia.

The "Geospatial Analysis using Google Earth Engine" course, offered by the Indian Institute of Remote Sensing (IIRS), is scheduled from February 19-23, 2024. This free online course covers the basics of geospatial analytics, visualization techniques, and machine learning applications for satellite imagery processing using Google Earth Engine.

Overall, Twenty Seven Participants (Students and Working Professional) attended the program in fully online mode and got benefitted.

Programme Schedule:

| S.No. | Date | Торіс | Speaker |
|-------|------------|---|----------------|
| 1. | 19.02.2024 | Basics of Geospatial Analytics and introduction of GEE interface | Prasun Gupta |
| 2. | 20.02.2024 | Visualization in GEE: Understanding spectral band combination and plotting spectral response curves. | Ravi Bhandari |
| 3. | 21.02.2024 | Spectral Indices in GEE: Generating Spectral Indices for extracting various Land Features e.g. vegetation, waterbody etc. | Shailja Mamgai |
| 4. | 22.02.2024 | Image Classification: Machine learning and other techniques for land feature classification | Prasun Gupta |
| 5. | 23.02.2024 | Data uploading and downloading in GEE for specific area of interest based analysis | Kamal Pandey |

Certificates by ISRO:

Institute Certificate by ISRO



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING भारतीय अंतरिक्ष अनुसंघान संगठन/ INDIAN SPACE RESEARCH ORGANISATION अंतरिक्ष विमाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



COR2024135642

बहि : पांससः संपर्कः / विस्तार कार्यक्रम प्रमाण पत्र OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

संस्थान की सहभागिता का प्रमाण पत्र CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि इंटेग्रल विश्वविद्यालय, लखनऊ ने भारतीय सुदूर संवेदन संस्थान, इसरो देहारादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठचकम गूगल अर्थ इंजन का उपयोग करके भू-स्थानिक विश्लेषण मे भाग लिया। इस ऑनलाइन पाठचकम का संचालन दिनांक 2024-02-19 से 2024-02-23 तक किया गया।

This is to certify that INTEGRAL UNIVERSITY, LUCKNOW- NODAL CENTER, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehardun on Geospatial Analysis using Google Earth Engine. This online programme was conducted during February 19, 2024 to February 23, 2024

Bankan

दिनाँक/ Date: 13-03-2024 देहरादून/ Dehradun प्रमुख, जियोवेन सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग Head, Geoweb Services, IT & Distance Learning Department, IIRS Sgranal

समूह प्रमुख, भू-स्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह Group Head, Geospatial Technologies & Outreach Programme Group, IIRS

Coordinator Certificate by ISRO



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING

भारतीय अंतरिक्ष अनुसंघान संगठन/ INDIAN SPACE RESEARCH ORGANISATION अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



ऑनलाइन दूरस्थ अधिगम कार्यक्रम ONLINE DISTANCE LEARNING PROGRAMME COR2024135642

समन्वयं का प्रमाणपत्र

CERTIFICATE OF COORDINATION

यह प्रमाणित किया जाता है कि इंटेग्रल विश्वविद्यालय, लखनऊ कार्यरत श्री इमरान उल्लाह खान, ने गूगल अर्थ इंजन का उपयोग करके भू-स्थानिक विश्लेषण विषय पर इस संस्थान द्वारा दिनांक 2024-02-19 से 2024-02-23 तक संचालित ऑनलाइन प्रशिक्षण पाठचकम को समन्वित किया।

This is to certify that **DR. IMRAN ULLAH KHAN**, working with **INTEGRAL UNIVERSITY, LUCKNOW-NODAL CENTER**, has coordinated the online training course on **Geospatial Analysis using Google Earth Engine** conducted by this institute during February 19, 2024 to February 23, 2024

दिनाँक/ Date: 13-03-2024 देहरादन/ Dehradun Antan

×५७», जियोवेब सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग Head, Geoweb Services, IT & Distance Learning Department, HRS Lysanal

भू-स्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह Group Head, Geografial Technologies & Outreach Programme Group, HF

Participant Certificates by ISRO



अंतरिक्ष विभाग /DEPARTMENT OF SPACE भारत सरकार/GOVERNMENT OF INDIA भारतीय अंतरिक्ष अनुसंधान संगठन /INDIAN SPACE RESEARCH ORGANISATION भारतीय सुदूर संवेदन संस्थान, देहरादून / INDIAN INSTITUTE OF REMOTE SENSING, DEHRADUN



नामोकन सं. / Enrolment No.: 20241352360989



CERTIFICATE OF ATTENDANCE

यह प्रमाणपत्र

MR. MD MODASSIR RABBANI

को " गुगल अर्थ इंजन का उपयोग करके भू-स्थानिक विश्लेषण "

में ऑनलाइन पाठचक्रम पूर्ण करने पर प्रदान किया जाता है।

इस ऑनलाइन पाठ्यकम का आयोजन 2024-02-19 से 2024-02-23 (कुल पाठ्यकम की अविध = 7 बंदे 30 मिनट) के दौरान किया गया।

(संवन्धित आई आई आर एस नोइल कंद्र- इंटेग्रल विश्वविद्यालय, लस्नक्त)

THIS CERTIFICATE IS

AWARDED TO

MR. MD MODASSIR RABBANI

ON COMPLETION OF THE ONLINE COURSE ON

"Geospatial Analysis using Google Earth Engine"

THIS ONLINE COURSE WAS CONDUCTED DURING 19-02-2024 to 23-02-2024 (Total course duration = 7 hrs & 30 minutes).

(Concerned IRS Nodal Centre- INTEGRAL UNIVERSITY, LUCKNOW- NODAL CENTER)

Attendance: 100 %

Amran Ullah Khan
Date: 26-03-2024 समन्वयक, विश्वविद्यालप/संस्थान
Place: Dehradun Coordinator, University/ Institution

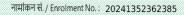
निदेशक/ Director आई.आई.आर.एस, देहरादून/ IIRS, Dehradun

UID- f8a783855332ba1baf52b5dd9c44548f. This Certificate can be validated using URL- https://certificate.iirs.gov.in



अंतरिक्ष विभाग /DEPARTMENT OF SPACE भारत सरकार/GOVERNMENT OF INDIA भारतीय् अंतरिक्ष अनुसंधान संगठन/INDIAN SPACE RESEARCH ORGANISATION भारतीय सुदूर संवेदन संस्थान, देहरादून / INDIAN INSTITUTE OF REMOTE SENSING, DEHRADUN







CERTIFICATE OF ATTENDANCE **ONLINE COURSE**

यह प्रमाणपत्र

MR. KUNVAR SARISH

को " गुगल अर्थ इंजन का उपयोग करके भुन्धानिक विश्लेषण "

में ऑनलाइन पाठचक्रम पूर्ण करने पर प्रदान किया जाता है।

इस ऑनलाइन पाठ्यक्रम का आयोजन 2024-02-19 से 2024-02-23 (कुल पाठ्यक्रम की अवधि = 7 घंटे 30 मिनट) के दौरान किया गया ।

(सवस्थित आई आई आर एस नोडल केंद्र- इंटेग्रल विश्वविद्यालय, लखनऊ)

THIS CERTIFICATE IS

AWARDED TO

MR. KUNVAR SARISH

ON COMPLETION OF THE ONLINE COURSE ON

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(Concerned IIRS Nodal Centre- INTEGRAL UNIVERSITY, LUCKNOW- NODAL CENTER)

Attendance: 100 %

Date: 26-03-2024

Place: Dehradun

Amran Ullah Khan

समन्वयक, विश्वविद्यालय/संस्थान

Coordinator, University/Institution e4cb09ef5320f1dc8009c37ed229d084. This Certificate can be validated using URL- https://certificate.iirs.gov.in

निदेशक/ Director आई.आई.आर.एस, देहरादून/ IIRS, Dehradun

