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A Project Report on Al-Based Solar Panel Detection in Madhya Pradesh Using Satellite Data

Submitted by

MAYUR KAILAS PATIL

(Roll no: 22Gl06, Enrollment No: 22201400301006)

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Academic year 2023-2024



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CERTIFICATE

This is to certify that the project work embodied in this report entitled "Al-Based Solar Panel Detection in Madhya Pradesh Using Satellite Data" was carried outby Mayur Kailas Patil (22201400301006) at the Geoinformatics department, Institute of Science and Technology for Advanced Studies and Research (ISTAR)- CVM University, Vallabh Vidyanagar fulfilment of the requirement for the award of M.Sc. (Geoinformatics) for the Project Work (201400401). This project work has been carried out under my guidance and it is to my satisfaction.

Dr. Krunal B. Suthar

Project Guide,

Head, P.G. Department of Geoinformatics

ISTAR-CVM University

Dr. M.M. Rai

Principal, ISTAR-CVM University

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CERTIFICATE

This is to certify that Mr. Mayur Kailas Patil, a student of M.Sc. (Geoinformatics) of The Charutar Vidya Mandal University, Anand, Gujarat has completed a four months (07 December-2023 to 15 April-2024) project on "Al-based Solar Panel Detection in Madhya Pradesh Using Satellite Data" under the supervision of Smt. Shweta Mishra, Sci/Engr-SF, EPSA-GAWG-VWAD, Space Applications Centre (ISRO), Ahmedabad. The research work was carried out through Scientific Research and Training Division (SRTD) of Space Applications Centre, Ahmedabad.

> डॉ सर्वेश्वर व्यास / Dr. S.P. Vyas प्रधान, वैज्ञानिक अनुसन्धान एवं पशिक्षण प्रभाग Head, Scientific Research and Training Division एसआरटीडी-आरटीएमजी-मीमा / SRID-RIMG-MISA

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Acknowledgement

I would like to express my sincere gratitude to all those who have contributed to the successful completion of my project "Al-based Solar Panel Detection in Madhya Pradesh using Satellite Data".

providing me with the resources, facilities, and conducive learning immense support they have shown to me during my stay. I would especially thankful to Dr. Shashikant Sharma (Scientist/Engr- 'G') for giving this opportunity to perform under the VEDAS department of SAC-ISRO.

I would like to extend my heartfelt gratitude to my project guide Ms. Shweta Mishra, who not only helped me tackle the various challengesl faced during the project but also has been a constant source for inspiration and taught me a lot of things including how things are done at a professional level. Her expertise and deep domain knowledge have been crucial in helping me navigate through the complexities of the project.

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Thanking you

Mayur Patil (22201400301006)