Dr. VADDI.RADHESYAM

Mobile: 9885023373 e-mail: syam.radhe@gmail.com

Educational qualifications

* Ph.D. from Vellore Institute of Technology, Vellore.

**Title of Thesis:** Unsupervised Dimensionality Reduction Techniques for Hyperspectral Remote Sensing Image Classification

* M.Tech Computer Science and Engineering, from University College of Engineering, Acharya Nagarjuna University, Guntur.

Professional Experience – 18 Years

* Associate Professor, Department of Information Technology, Siddhartha Academy of Higher Education, Deemed to be University, Vijayawada, Andhra Pradesh ***(2025-Present)***
* Sr. Assistant Professor, Department of Information Technology, Siddhartha Academy of Higher Education, Deemed to be University, Vijayawada, Andhra Pradesh ***(2023-2025)***
* Assistant Professor, Department of Information Technology, V R Siddhartha Engineering College, Vijayawada, Andhra Pradesh ***(2007-2023)***

Research Experience

Investigatorin NRSC RESPOND funded Project***(June-2022 to Present)***

* Developing Efficient Local Scale Impact Evaluation tools using Geospatial System to Assess National Development Mission Outcomes and SDG Goals 03*-Years*
* Time Series Crop Analysis Using Multispectral Remote Sensing, Published in Springer LNNS 2024.

Investigatorin NRSC RESPOND funded Project***(Oct-2016 to Nov-2018)***

* Development and evaluation of algorithms for automated tree delineation and tree parameters (height and crown diameter) estimation for forestry applications 02-Years.
* Object based Classification of Multispectral Remote Sensing Images for Forestry Applications. Published in ACM Digital Library 2020.

Research Fellowship from Indian science academy ***(May-2013 to Aug-2013)***

* Worked on a Project related to Object detection and recognition under the guidance of Dr C.V Jawahar, Professor at Center for Visual Information Technology, IIITH
* Database on Indian movie Faces is created (https://cvit.iiit.ac.in/projects/IMFDB/)
* Indian movie face database: a benchmark for face recognition under wide variations. Published in IEEE Xplore Digital Library 2020.

Memberships

* Life Member of Indian Society of Remote Sensing (ISRS) (Member No: L-4938)
* International Society for Photogrammetry and Remote Sensing (ISPRS)

Academic strengths

* Subjects Taught :Image Processing, Computer vision, Machine Learning, C Programming, Python Programming, Data structures and Analysis of Algorithms
* Novel Teaching & Learning Techniques adopted like POGIL and Learning by Doing.
* Involvement in curriculum Design: Developed syllabus for Data structures, Computer vision and C Programming
* Technical Skills :C,C++, Python, Matlab, Latex, QGIS, Google Earth Engine

Responsibilities

* Research coordinator: Facilitate smooth functioning and implementation of different Research activities in the department and University.
* Guiding 01 Research Scholar at Siddhartha University.
* Project coordinator: Planning and Monitoring of Student Academic Projects.
* Project review member: Member of the review committee for different types of student academic projects.
* Associate coordinator in conducting Indian Institute of Remote Sensing ( IIRS)

e-Learning courses.

* Active involvement in the implementation of criteria’s related to NBA and NAAC.
* Supporting the students in acquiring projects and Internships.
* Module coordinator for Computer vision and Remote sensing Research Group

**Research Areas**

* Hyperspectral Remote sensing
* Computer vision, Image processing
* Deep Learning

**Research Profiles**

|  |  |  |
| --- | --- | --- |
| **Number of Documents in Scopus** | **h-index** | **Number of Citations** |
| 56 | 11 | 638 |

* **Scopus id:** <https://www.scopus.com/authid/detail.uri?authorId=55797717700>
* **Google Scholar id:** <https://scholar.google.com/citations?user=8vLcTp4AAAAJ&hl=en>
* **LinkedIn id:** <https://www.linkedin.com/in/dr-radhesyam-vaddi-12972521/>
* **Research Gate:** <https://www.researchgate.net/profile/Radhesyam_Vaddi>
* **ORCID:** <https://orcid.org/0000-0002-7356-7652>
* **VIDWAN:** <https://vidwan.inflibnet.ac.in/profile/326616>

SCIE Journal Publications

1. Manne, S., Sahithi, V. S., Vaddi, R., Cheepulla, H., Pujar, G. S., & Murthy, M. S. R. (2025). Geo-spatial Impact Evaluation of Developmental Initiatives in a Water-Sensitive Region of India Supporting Sustainable Development Goals. International Journal of Environmental Research, 19(5), 1-25.
2. Phaneendra, K.L.N.B, Radhesyam Vaddi, and Prabukumar Manoharan et al., Band selection using oppositional whale optimization for hyperspectral image classification, “Vibrational Spectroscopy”, 103830 (2025).
3. Phaneendra, K.L.N.B, Radhesyam Vaddi, and Prabukumar Manoharan *et al.*, A new band selection framework for hyperspectral remote sensing image classification, “*Scientific Reports”,* 31836 (2024). https://doi.org/10.1038/s41598-024-83118-8,
4. Radhesyam Vaddi, Phaneendra, K.L.N.B and Prabukumar Manoharan *et al.*, Strategies for dimensionality reduction in hyperspectral remote sensing: A comprehensive overview." The Egyptian Journal of Remote Sensing and Space Sciences 27.1 (2024): 82-92
5. Agilandeeswari, L.; Prabukumar, M.; Radhesyam, V.; Phaneendra, K.L.N.B.; Farhan, A. Crop Classification for Agricultural Applications in Hyperspectral Remote Sensing Images. Appl. Sci. 2022, 12, 1670. <https://doi.org/10.3390/app12031670>
6. Prabukumar Manoharan and Radhesyam Vaddi "Wavelet enabled ranking and clustering-based band selection and three-dimensional spatial feature extraction for hyperspectral remote sensing image classification," Journal of Applied Remote Sensing 15(4), 044506 (27 October 2021)
7. Radhesyam Vaddi and Prabukumar Manoharan, Hyperspectral remote sensing image classification using combinatorial optimisation based un-supervised band selection and CNN, IET Image Processing, 2020, 14, (15), pp. 3909-3919, ISSN 1751-9667.
8. Radhesyam Vaddi and Prabukumar Manoharan, CNN based hyperspectral image classification using unsupervised band selection and structure-preserving spatial features, Infrared Physics & Technology, Volume 110, 2020, ISSN 1350-4495.
9. Radhesyam Vaddi and Prabukumar Manoharan, Hyperspectral image classification using CNN with spectral and spatial features integration, Infrared Physics & Technology, Volume 107, 2020, ISSN 1350-4495

Professional Development Programs/Courses

* Completed Faculty Training program on Geo-Informatics at IIT Tirupati
* Attended Summer School on Artificial Intelligence at CVIT IIIT-Hyderabad
* Wipro Certified Faculty on Programming 2025
* Certification from Coursera on Data structures and Machine Learning

Permanent address

Vaddi.Radhesyam

House Number 7-144/206, Flat Number 206

Panchayat Raj employees Colony

Penamluru-521139

Krishna District, Andhra Pradesh

**(VADDI.RADHESYAM)**