

Bio-data:

Name: Jayabharathi Sethuraman
 Designation: Scientist / Engineer 'SF'
 Organisation: **National Remote Sensing Centre (NRSC) /
 Indian Space Research Organization (ISRO)**
 Department: Department of Space, Govt. of India
 Experience: 23 Years

**Qualifications:**

Education	Year of Passing	Institute
Secondary School Certificate (SSC)	Mar' 1993	Periyar Maniammai Girl's Secondary School, Trichy
Higher Secondary School Certificate (HSC)	Mar' 1995	Periyar Maniammai Girl's Secondary School, Trichy
Bachelor of Technology (Electronics and Communication)	1995-1999	Moogambigai College of Engineering, Keeranur, Pudukkottai
M.Tech(Software Systems)	2015-2017	BITS, Pilani

Official Contributions: (From 14th March 2001 to 30st March 2023)

- Involved in comprehensive quality evaluations of satellite imagery, for environmental monitoring, land cover mapping, and urban planning projects.
- Evaluation of geometric correction, radiometric calibration, and spectral analysis techniques to ensure data accuracy and consistency for all Indian Remote Sensing data (IRS) missions launched since 2001.
- Expertise in processing and analysis of optical remote sensing data from sensors such as IRS - 1C/1D/P5/P6, Cartosat-2 series and Ocean Colour Monitor (OCM) -2, OCM-3.
- Proficient in processing and analysis of microwave Synthetic Aperture Radar (SAR) remote sensing data from sensors such as RISAT-1, EOS-04 and RISAT-1B series.
- Contributed to research projects on data fusion, change detection, and accuracy assessment methodologies.
- Presented findings at conferences and workshops
- Providing Feedback to The Mission and Designers on the Platform Stability and Payload Sensors Response, by evaluating the Geometric and Radiometric Quality of IRS Satellite data products, for fine-tuning and optimizing the on-board and software parameters.

Membership:

- **Life Member of Indian Society of Remote Sensing (ISRS)**

Papers and Presentations:

1. "Monitoring and performance analysis of the Scatterometer Mission for the Orbital phase", at SMOPS conference 2023, Bangalore.
2. "SAR Data Quality Characterization and Calibration Analysis of EOS04", at SASAT-2023
3. "In-Orbit Performance Assessment Using Internal Instrument and Absolute Calibration of EOS-04" CEOS SAR Cal/Val 2023 Workshop at DLR, Germany.

4. Publication of paper at ISPRS symposium: Presented a research paper titled “Cross Calibration of IRS - 1C and IRS -1D WIF sensors using near synchronous matching scenes” at ISPRS symposium held in Tiruvandram .
5. Co-author of the paper titled “Development of Advanced Data Quality Evaluation Tools for High Resolution IRS-Satellite Data with IDL/ENVI” presented in first User Meet on Digital Image Processing and Spatial
6. Information Technology using ENVI/IDL held at New Delhi.
7. ‘Search based water layer extraction from C-band SAR Image’, is under review in the journal of IEEE Transactions and Geoscience and remote sensing.
8. ‘A multi threaded feature extraction tool for SAR images using Open Source Software Libraries ‘, in ISPRS TCV MidTerm Symposium 2018 .
9. ‘Water Bodies Mapping from SAR Imagery – An Improved Algorithm, in 38th INCA International Congress.
10. ‘Quantification of Particulate Matter Using Haze Optimized Transform (HOT) of Oceansat-2 OCM Data’ is submitted Second International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019)