SHRIDHAR DIGAMBAR JAWAK

Project Scientist B, Polar Remote Sensing Division, Polar Sciences Group, ESSO-NCAOR IASC Fellow-2017, Cryosphere Working Group, International Arctic Science Committee

Area of Research

Remote Sensing of the Cryosphere

Academic Profile

2013 – 2017 : Ph.D. (Geoinformatics), Mangalore University, Mangalore

2007 – 2009 : M. Sc. (Geoinformatics), Savitribai Phule Pune University SPPU (Formerly University of Pune), Pune

Professional Experience

2016 onwards: Project Scientist B, ESSO-NCAOR

2017 onwards: International Arctic Science Committee (IASC) Fellow, Cryosphere Working Group.

2011 – 2016 : Senior Research Fellow, ESSO-NCAOR 2009 – 2011 : Junior Research Fellow, ESSO-NCAOR

Scientific Expeditions

2015, Summer: Member of Indian Scientific Expedition to Arctic (Ny-Ålesund)

2014 – 2015 : Member of 34th Indian Scientific Expedition to Antarctica

2013 – 2014: Member of 33rd Indian Scientific Expedition to Antarctica

2011 – 2012: Member of 31st Indian Scientific Expedition to Antarctica

Certificates / Honours

- 2017: Recipient of prestigious International Arctic Science Committee (IASC) fellowship.
- 2017: Recipient of 'Rachapudi Kamakshi Memorial Gold Medal' for 'Young Geospatial Scientist', Geospatial World Forum, Hyderabad International Convention Centre, Hyderabad, India.
- 2017: Recipient of Japan Aerospace Exploration Agency (JAXA) Research Collaborative Project (self is a Co-PI)
- 2016: Certificate for highly cited research in Polar Science.
- 2016: Lead convener/chair of the session "Remote Sensing of the Antarctic Environment: Multi-disciplinary advances" at SCAR Open Science Conference, Kuala Lumpur, Malaysia.
- 2016: Best Poster award for my abstract "Empirical modelling of bathymetry of Antarctic lakes using high-resolution multispectral imagery, at XXXIV SCAR and Open Science Conference, Malaysia.
- 2015: Highly competitive selection and travel grant to attend POLENET-SERCE glacial isostatic adjustment (GIA) training school at the Ohio State University's Stone Laboratory on Gibraltar Island.
- 2015: Lead convener/chair of the session "New Frontiers in Remote Sensing in Antarctic Earth Sciences: Cross-disciplinary advances" at International symposium on Antarctic Earth Sciences (ISAES), India.
- 2015: Best Poster award for my abstract "Potential of SAR imagery for mapping and monitoring iceberg calving events in Antarctic environment" at ISAES, Goa, India.
- 2015: Keynote speaker of the session "New Frontiers in Remote Sensing in Antarctic Earth Sciences: Cross-disciplinary advances" at ISAES.
- 2015: Editorial Board Member of Journal of Terrestrial and Marine Research
- 2014: Indian National Science Academy (INSA) international travel grants to attend 6th SCAR OSC-2014, New Zealand.
- 2013: Winner of the International Society for Photogrammetry and Remote sensing (ISPRS)-DMCii imagery contest
- 2012: Awarded the third best prize for poster presentation at PORSEC-2012, Kochi, India.
- 2012: Co-convener of the Session "Mapping Antarctica and the Southern Ocean: ADMAP, BEDMAP, IBCSO and other activities", 5th SCAR Open Science Conference (OSC), Portland, USA.
- 2012: INSA international travel grants to attend SCAR OSC-2012, USA.
- 2012: Ice-Sheet Mass Balance and Sea Level (ISMASS) Workshop Travel Grant, USA.
- 2011: International travel grant from the Department of Science and Technology (DST), India to attend 11th ISAES-2011, Edinburgh, Scotland, U.K.
- 2011: SCAR-ISAES Early Career Scientist funding to attend ISAES- 2011, Scotland, U.K.
- 2011: Excellent Oral Presentation Award at ICESE-2011, Hong Kong, China.
- 2010: Argentine Government Fellowship to attend 4th SCAR-OSC-2010, Argentina.
- 2010: INSA and SCAR international travel grants to attend SCAR-OSC-2010, Argentina.

Selected Publications

- [1] **Jawak, S.D.**, Vadlamani, S.S., and Luis, A.J. (2015). A synoptic review on deriving bathymetry information using remote sensing technologies: models, methods and comparisons. *Advances in Remote Sensing*, Vol. 2, No. 4, pp. 147-162. DOI: http://dx.doi.org/10.4236/ars.2015.42013
- [2] **Jawak, S.D.**, Devliyal, P., and Luis, A.J. (2015). A comprehensive review on pixel oriented and object oriented methods for information extraction from remotely sensed satellite images with a special emphasis on cryospheric applications. *Advances in Remote Sensing*, Vol.4, No.3, pp. 177-19. DOI: 10.4236/ars.2015.43015.
- [3] **Jawak, S.D.**, Kulkarni, K., and Luis, A.J. (2015). A review on extraction of lakes from remotely sensed optical satellite data with a special focus on cryospheric lakes. *Advances in Remote Sensing*, Vol. 4, No. 2, pp. 196-213. DOI: 10.4236/ars.2015.43016
- [4] **Jawak, S.D.**, Bidawe, T.G., and Luis, A.J. (2015). A review on applications of imaging synthetic aperture radar with a special focus on cryospheric studies. *Advances in Remote Sensing*, Vol. 4, No. 2, pp. 163-175. DOI: 10.4236/ars.2015.42014.
- [5] **Jawak, S.D.**, Luis, A.J. (2014). A semiautomatic extraction of Antarctic lake features using WorldView-2 imagery, *Photogrammetric Engineering & Remote Sensing*, Vol. 80, No. 10, pp. 939-952, DOI: 10.14358/PERS.80.10939.
- [6] Shetye S.S., Gupta R.M., Jafar, S., Nair, A., Patil S.M., **Jawak, S.D.**, Asthana, R. and Gazi, S. (2014). Silicate depletion under Antarctic sea ice: evidence from Sponge spicules, Current Science., 107 (2).
- [7] **Jawak, S.D.**, Luis, A.J., Panditrao, S.N., Khopkar, P.S., and Jadhav, P.S. (2013). Advancement in landcover classification using very high resolution remotely sensed 8-band WorldView-2 satellite data. *International Journal of Earth Sciences and Engineering*, ISSN 0974-5904, Vol. 06, No. 06(02), pp. 1742-1749.
- [8] **Jawak, S.D.,** Luis, A.J. (2013). Very-high resolution remotely sensed satellite data for improved land cover extraction of Larsemann Hills, east Antarctica. *Journal of Applied Remote Sensing*, 0001;7(1):073460. DOI:10.1117/1.JRS.7.073460.
- [9] **Jawak, S.D.**, Panditrao, S.N., and Luis, A.J. (2013). Validation of high-density airborne LiDAR-based feature extraction using very high resolution optical remote sensing data. *Advances in Remote Sensing*, Vol. 2 No. 4, 2013, pp. 297-311. DOI: 10.4236/ars.2013.24033.
- [10] **Jawak, S.D.**, Luis, A.J. (2013). A comprehensive evaluation of PAN-sharpening algorithms coupled with resampling methods for image synthesis of very high resolution remotely sensed satellite data. *Advances in Remote Sensing*, Vol. 2 No. 4, pp. 332-344. DOI: 10.4236/ars.2013.24036.
- [11] **Jawak, S.D.**, Luis, A.J. (2013). Improved land cover mapping using high resolution multiangle 8-band WorldView-2 satellite remote sensing data. *Journal of Applied Remote Sensing*, 7(1), 073573, DOI: 10.1117/1.JRS.7.073573.
- [12] **Jawak, S.D.,** Luis, A.J. (2013). A spectral index ratio-based Antarctic land-cover mapping using hyperspatial 8-band WorldView-2 imagery. *Polar Science*, Vol. 7, No. 1, pp. 18–38, ISSN 1873-9652, DOI:10.1016/j.polar.2012.12.002.
- [13] **Jawak, S.D.**, Luis, A.J. (2012). Synergistic use of multitemporal RAMP, ICESat and GPS to construct an accurate DEM of the Larsemann Hills region, Antarctica. *Journal of Advances in Space Research*, Vol. 50, No. 4, pp. 457–470, DOI:10.1016/j.asr.2012.05.004.

Publications Statistics:

Criteria	Score
International Peer-Reviewed Journals	16
International Peer-Reviewed Conference Papers	19
Proceedings of International and National conference/symposium/workshop	05
Book chapter/ Technical publications/ Scientific reports	04
International oral/abstract/poster/paper presentations	88
Total number of publications (papers, abstracts, posters, book chapters)	132

Google Scholar	
Citations	381
i10-index	13
h-index	11

<u>Complete list of publications</u>: Available on request <u>References</u>: Available on request