

Curriculum Vitae

Shwetha Hassan Rangaswamy

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<https://scholar.google.co.in/citations?user=WdbKEL0AAAAJ&hl=en>

EDUCATION

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| Ph.D. | Indian Institute of Science, Bangalore
Department of Civil Engineering,
<i>Thesis: Estimation of daily actual evapotranspiration using microwave and optical vegetation indices for clear and cloudy sky conditions.</i> | 2017 |
| M.Tech | National Institute of Technology, Surathkal
Department of Applied Mechanics and Hydraulics,
(Specialization: Remote Sensing and GIS)
<i>Thesis: Estimation of reference evapotranspiration using AWS data.</i> | 2011 |
| B.E | Malnad college of Engineering, Hassan
Civil Engineering | 2009 |

RESEARCH EXPERIENCE

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| Indian Institute of Science, Bangalore
Research Associate, ICWaR | September 2018 – September 2019 |
| Indian Institute of Science, Bangalore
Research Associate Provisional, Centre for Earth Sciences | Jan 2017 – May 2017 |
| Indian Space Research Organization (ISRO)
Intern, Regional Remote Sensing Centre, Bengaluru | September 2010 – April 2011 |

RESEARCH INTERESTS

Optical and Microwave Remote Sensing, Surface and Subsurface Water Hydrology, Remote sensing applications for Water Resources and Agriculture, Remote sensing in Irrigation Management, Digital Image Processing.

PUBLICATIONS

Peer Reviewed Journals

- **Shwetha, H R** and D Nagesh Kumar., 2018. Performance evaluation of satellite based air temperature and reference evapotranspiration over a river basin. *Hydrological Sciences Journal*, 63(9), 1347-1367, (DOI: <https://doi.org/10.1080/02626667.2018.1505046>). (Impact factor: **2.180**). (The article on this work featured in Science Trends).
- **Shwetha, H R** and D Nagesh Kumar., 2018. Estimation of daily vegetation coefficients using MODIS data for clear and cloudy sky conditions. *International Journal of Remote Sensing*, 39(11), 3776-3800. (Impact factor: **2.493**) (DOI: <https://www.tandfonline.com/eprint/ZIcb9dJBIDfxtrPnXTPy/full>).
- **Shwetha, H, R.**, Nagesh, Kumar, D., 2016. Prediction of high spatio-temporal resolution of land surface temperature under cloudy sky conditions using microwave vegetation index and ANN. *ISPRS Journal of Photogrammetry and Remote Sensing*, 117, 40-55. (Impact factor: **6.942**), (The article on this work appeared in Bangalore Mirror). Citations: **15**. (DOI: <https://doi.org/10.1016/j.isprsjprs.2016.03.011>).
- **Shwetha, H, R.**, Nagesh, Kumar, D., (2015). Prediction of LST under cloudy sky conditions using microwave remote sensing and ANN. *Aquatic Procedia*, 4, 1381-1388. Citations : **8**. (DOI: <https://doi.org/10.1016/j.aqpro.2015.02.179>).
- Arun, K., Varun, V, M., Dwarkish, G, S., Kavyashree, B., **Shwetha H, R.**, 2012. Soil loss estimation through MUSLE using Kirpich and Williams times of concentration using RS and GIS techniques: a case study, *ISH Journal of Hydraulic Engineering/ Taylor and Francis*, 18 (1), 1-10. (Impact factor: **0.36**). Citation: **1**. (DOI: <https://doi.org/10.1080/09715010.2011.646390>).

Conference Presentations

- **Shwetha, H, R.**, Nagesh, Kumar, D., 2013. A Comparative Study of Vegetation Indices Derived from Passive Microwave and Optical Sensors of Satellite. Proceedings of HYDRO 2013 INTERNATIONAL, XVIII Conference on Hydraulics, Water Resources, Coastal and Environmental Engineering, IIT Madras, India, 4-6 December, 869-877, CD-ROM Proceedings.
- **Shwetha, H, R.**, Nagesh, Kumar, D., 2015. Prediction of Land Surface Temperature under Cloudy Conditions using Microwave Remote Sensing and ANN. ICWRCOE'2015, NIT, Surathkal, Karnataka, 12 - 15 March.
- **Shwetha, H, R.**, Nagesh, Kumar, D., 2015. Estimation of daily reference evapotranspiration using temperature based models and remotely sensed data over Indian River basin. European Geosciences Union General Assembly, Vienna, Austria, 12 - 17 April.
- **Shwetha, H, R.**, Nagesh, Kumar, D., 2019. Evaluation of satellite based ET₀ models for all sky conditions. Water Future Conference, Bengaluru, and 24 – 27 September.