

RESEARCH PAPERS PUBLISHED IN JOURNALS / CONFERENCE PROCEEDINGS

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Email ID	:	sonam@mnnit.ac.in
Total Publications	:	22
Journal	:	08
Conferences	:	13
Book Chapters	:	01

A. JOURNAL

- [1] K. Dutta, D. Basu, and **S. Agrawal**, "Evaluation of seasonal variability in magnitude of urban heat islands using local climate zone classification and surface albedo," *International Journal of Environmental Science and Technology*, vol. -, Aug. 2021, doi: 10.1007/s13762-021-03602-w.
- [2] A. K. Tripathi, **S. Agrawal**, and R. D. Gupta, "Comparison of GIS-based AHP and fuzzy AHP methods for hospital site selection: a case study for Prayagraj City, India," *GeoJournal*, vol. -, May 2021, doi: 10.1007/s10708-021-10445-y.
- [3] K. Dutta, D. Basu, and **S. Agrawal**, "Synergetic interaction between spatial land cover dynamics and expanding urban heat islands," *Environmental Monitoring and Assessment*, vol. 193, no. 4, p. 184, Apr. 2021, doi: 10.1007/s10661-021-08969-4.
- [4] S. Kumar and **S. Agrawal**, "Prevention of vector-borne disease by the identification and risk assessment of mosquito vector habitats using GIS and remote sensing: a case study of Gorakhpur, India," *Nanotechnology for Environmental Engineering*, vol. 5, no. 2, p. 19, Aug. 2020, doi: 10.1007/s41204-020-00084-y.

- [5] A. K. Saha and **S. Agrawal**, “Mapping and assessment of flood risk in Prayagraj district, India: a GIS and remote sensing study,” *Nanotechnology for Environmental Engineering*, vol. 5, no. 2, p. 11, Aug. 2020, doi: 10.1007/s41204-020-00073-1.
- [6] **S. Agrawal** and R. D. Gupta, “Development of SOA-based WebGIS framework for education sector,” *Arabian Journal of Geosciences*, vol. 13, no. 13, pp. 1–20, Jul. 2020, doi: 10.1007/s12517-020-05490-9.
- [7] A. K. Tripathi, **S. Agrawal**, and R. D. Gupta, “Cloud enabled SDI architecture: a review,” *Earth Science Informatics*, vol. 13, no. 2, pp. 211–231, Jun. 2020, doi: 10.1007/s12145-020-00446-9.
- [8] **S. Agrawal** and R. D. Gupta, “Web GIS and its architecture: a review,” *Arabian Journal of Geosciences*, vol. 10, no. 23, p. 518, Dec. 2017, doi: 10.1007/s12517-017-3296-2.

B. PUBLICATIONS IN INTERNATIONAL CONFERENCE PROCEEDINGS

- [1] A. K. Tripathi, **S. Agrawal**, and R. D. Gupta, “WPS enabled SDI: an open source approach to provide geoprocessing in web environment,” in *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, Dhulikhel, Nepal, Dec. 2019, vol. IV-5/W2, no. 5/W2, pp. 119–126, doi: 10.5194/isprs-annals-IV-5-W2-119-2019.
- [2] D. K. Meena, R. Tripathi, and **S. Agrawal**, “GIS based multi-parameter optimal path analysis for rural schools,” in *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, Dhulikhel, Nepal, Dec. 2019, vol. IV-5/W2, no. 5/W2, pp. 67–74, doi: 10.5194/isprs-annals-IV-5-W2-67-2019.
- [3] K. Dutta, D. Basu, and **S. Agrawal**, “Nocturnal and diurnal trends of surface urban heat island intensity: a seasonal variability analysis for smart urban planning,” in *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, Dhulikhel, Nepal, Dec. 2019, vol. IV-5/W2, pp. 25–33, doi:

10.5194/isprs-annals-IV-5-W2-25-2019.

- [4] **S. Agrawal** and G. B. Khairnar, “A comparative assessment of remote sensing imaging techniques: optical, SAR and LiDAR,” in *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, Dhulikhel, Nepal, Dec. 2019, vol. XLII-5/W3, pp. 1–6, doi: 10.5194/isprs-archives-XLII-5-W3-1-2019.
- [5] S. Mahmoodi, K. Dutta, D. Basu, and **S. Agrawal**, “Understanding link between land surface temperature and landscape heterogeneity: a spatio-temporal and inter-seasonal variability study on Kabul city, Afghanistan,” in *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Capacity Building and Education Outreach in Advance Geospatial Technologies and Land Management, Dhulikhel, Nepal, Dec. 2019, vol. IV-5/W2, pp. 57–65, doi: 10.5194/isprs-annals-IV-5-W2-57-2019.
- [6] V. Kumar and **S. Agrawal**, “Agricultural land use change analysis using remote sensing and GIS: a case study of Allahabad, India” in *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, ISPRS WG III/10, GEOGLAM, ISRS Joint International Workshop on Earth Observations for Agricultural Monitoring, New Delhi, India, Jul. 2019, vol. XLII-3/W6, pp. 397–402, doi: 10.5194/isprs-archives-XLII-3-W6-397-2019.
- [7] A. K. Tripathi, **S. Agrawal**, and R. D. Gupta, “A comparative analysis of conventional Hadoop with proposed cloud enabled Hadoop framework for spatial big data processing,” in *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, ISPRS TC V Mid-term Symposium "Geospatial Technology - Pixel to People", Dehradun, India , Nov. 2018, vol. IV–5, no. November, pp. 425–430, doi: 10.5194/isprs-annals-IV-5-425-2018.
- [8] K. Dutta, D. Basu, and **S. Agrawal**, “Temporal and spatial analysis of urban heat island using Landsat satellite data: two Indian case studies,” in *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, ISPRS TC V Mid-term Symposium "Geospatial Technology - Pixel to People", Dehradun, India Nov. 2018, vol. IV–5, pp. 71–78, doi: 10.5194/isprs-annals-IV-5-71-2018.
- [9] P. Yadav and **S. Agrawal**, “Road Network identification and extraction in satellite

imagery using Otsu's method and connected component analysis," in *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, ISPRS TC V Mid-term Symposium "Geospatial Technology - Pixel to People", Dehradun, India, Nov. 2018, vol. XLII-5, no. November, pp. 91–98, doi: 10.5194/isprs-archives-XLII-5-91-2018.

- [10] **S. Agrawal** and R. D. Gupta, "Application of image analysis in land-use and land-cover assessment around schools for planning and development," in *Proceedings of the Computer Graphics International Conference*, Yokohama, Japan, Jun. 2017, vol. Part F1286, pp. 1–4, doi: 10.1145/3095140.3095144.
- [11] **S. Agrawal** and R. D. Gupta, "School mapping and geospatial analysis of the schools in Jasra development block of India," in *ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XXIII ISPRS Congress, Prague, Czech Republic, Jun. 2016, vol. XLI-B2, no. July, pp. 145–150, doi: 10.5194/isprsarchives-XLI-B2-145-2016.
- [12] **S. Agrawal**, D. K. Meena, and R. D. Gupta, "Comprehensive review of GIS and Web GIS," *Discovery*, vol. 41, no. September, pp. 130–135, 2015.
- [13] **S. Agrawal** and R. D. Gupta, "Development and comparison of open source based web GIS frameworks on WAMP and Apache Tomcat web servers," in *The International Archives of the Photogrammetry Remote Sensing and Spatial Information Sciences*, ISPRS Technical Commission IV Symposium on "Geo-spatial Databases and Location Based Services", Suzhou, China, Apr. 2014, vol. XL-4, no. 4, pp. 1–5, doi: 10.5194/isprsarchives-XL-4-1-2014.

C. BOOK CHAPTERS

- [1] Book Chapter entitled "A conceptual framework of public health SDI" by A. K. Tripathi, **S. Agrawal**, and R. D. Gupta, 2020, In: Ghosh, J.K. and I. da Silva (eds), *Applications of Geomatics in Civil Engineering*, Lecture Notes in Civil Engineering, vol. 33, pp: 479-487, Springer Nature Singapore Pte. Ltd., ISBN (eBook): 978-981-13-7067-0, doi: 10.1007/978-981-13-7067-0_37.