

## Curriculum Vitae

**Rajib Sarkar**, Ph.D. PGD (RS & GIS), PGD (UM & P)

**Department:** Department of Geography

**Designation:** Assistant Professor (Level- II)

**Date of Birth:** 13/03/1984

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Dr. Rajib Sarkar is a young geographer who has completed his graduation from Chandannagore Govt. College in 2005 and also completed his Post Graduation in Geography 2007 with specialisation of Advanced Geomorphology. He joined as Junior Research Fellow (CSIR-UGC) from 2011 and was awarded Ph.D in 2016. He has completed his Post Graduate Diploma in Applied Remote Sensing and GIS from Jadavpur University in 2013 and Post Graduate Diploma in Urban Management and Planning from Calcutta University in 2017. Prior to joining as an Assistant Professor in Adamas University, he was a Visiting Faculty and Resource Person in Jadavpur University, Kalyani University and Diamond Harbour Women's University. Dr. Rajib Sarkar has keen interest on applications geospatial technology on environmental research especially with R software environment. He is teaching R as part of the course curriculum and using R as a part of his research.

### Area of Research:

- i) Urban Ecosystem Services (UES) assessment of vegetation
- ii) Thermal Remote Sensing
- iii) Urban Growth Modelling

- iv) Statistical Applications in Geoscience.

### **Past Employment:**

- i) Visiting Faculty (January, 2017 – May, 2017), Department of Geography, Jadavpur University, Kolkata.
- ii) Resource Person (August, 2016 – May, 2017), Department of Geography, Daimond Harbour Women's University, South 24 Pargana.
- iii) Guest Faculty (March, 2014 – May, 2017), Department of Geography, The University of Kalyani, North 24 Pargana.
- iv) Senior Research Fellow (2014 - 2016), Department of Geography, The University of Burdwan.
- v) Junior Research Fellow (2011 – 2014), Department of Geography, The University of Burdwan.
- vi) Project Research Fellow (2009-2011), Department of Geography, The University of Burdwan.

### **Awards / Honors:**

- i) Awarded Best poster on National Science Day'2019 poster competition at Adamas University, India
- ii) Received **Council of Scientific & Industrial Research (CSIR-UGC) Fellowship** (2011-2016) for clearing JRF and eligibility for Lectureship (NET, December, 2009) test, conducted by **Human Resource Development Group, Govt. of India**, in Earth, Atmosphere and Planetary Science.
- iii) UGC- NET Lectureship in June, 2012

### **Publications**

1. **Sarkar, R.** & Mandal, S. (2024) Urban growth modelling in the Bardhaman planning area: An exploration of cellular automata and Markov chain techniques, *Sustainable Urban Forms and Communities: Urban Geographies of Eastern India*, pages: 101-118, ISBN No: 9781003509400, Routledge India.
2. **Sarkar, R.** & Boral, M. (2023) Monitoring Land Use & Land Cover Change in an Urban Landscape: A Case Study of Siliguri, India, *IOP Conference Series: Earth and Environmental Science*, Volume 1164, International Conference on Geospatial Science

for Digital Earth Observation (GSDEO-2021) 26/03/2021 - 27/03/2021 Online, <https://doi.org/10.1088/1755-1315/1164/1/012003>.

3. Das, S., & **Sarkar, R.** (2023) Spatiotemporal Change Detection Analysis of Land Cover and Land Use using Multi-Temporal Remote Sensed Imagery and Landscape Metrics: A Sub-Catchment Level Case Study of the Bhagirathi-Hugli River, West Bengal, India, *IOP Conference Series: Earth and Environmental Science*, Volume 1164, International Conference on Geospatial Science for Digital Earth Observation (GSDEO-2021) 26/03/2021 - 27/03/2021 Online, <https://doi.org/10.1088/1755-1315/1164/1/012011>.
4. De, S., Routh, D., Hazra, S., Kandar, P., Sarkar, S., Mitra, S., Bhadra, T., **Sarkar, R.**, Baral, M., & Rai, A. (2023) Assessing the Socio-Economic Setup of Ravangla, Sikkim, and the Vulnerability of its Community using Geoinformatics. *IOP Conference Series: Earth and Environmental Science*, Volume 1164, International Conference on Geospatial Science for Digital Earth Observation (GSDEO-2021) 26/03/2021 - 27/03/2021 Online, <https://doi.org/10.1088/1755-1315/1164/1/012016>
5. Biswas, D., & **Sarkar, R.** (2022) Rise of marigold floriculture, a new stirring door walk through economic, social, and entertainment factors in Eastern India: a combined approach of multi-group structural equation modeling and cluster analyses. *Qual Quant* <https://doi.org/10.1007/s11135-022-01347-3>. Springer Nature.
6. Das, S., & **Sarkar, R.** (2021) Monitoring and evaluating the spatiotemporal variations of the water quality of a stretch of the Bhagirathi-Hugli River, West Bengal, India, using geospatial technology and integrated statistical methods. *Environmental Science and Pollution Research*, <https://doi.org/10.1007/s11356-020-11655-6> , Springer Nature (IF: 5.8).
7. Biswas, D., & **Sarkar, R.** (2020). Impact of soil chemical properties on marigold production in Ranaghat-II, Nadia, India. *Spatial Information Research*, <https://doi.org/10.1007/s41324-020-00347-5> , Springer Nature
8. Das, S., & **Sarkar, R.** (2019) Impact of brickfields on soil quality of agricultural land along the Bhagirathi-Hugli river basin, West Bengal, India, *Spatial Information Research*, Vol: 28, No: 4, <https://doi.org/10.1007/s41324-019-00304-x>, Springer Nature.
9. Das, S., & **Sarkar, R.** (2019) Predicting land use and land cover change using Markov model: A case study of Bhagirathi – Hugli river basin, *Spatial Information Research*, Vol: 27, No: 4 <https://doi.org/10.1007/s41324-019-00251-7>, Springer Nature.

10. **Sarkar, R.** (2016) Estimation of Land Surface Temperature Based on Landsat 8 Data: A Case Study of Burdwan Municipality, *Geographical Review of India*, Vol. 78, No. 4, pp. 367-377, ISSN No: 0975 - 833X
11. **Sarkar, R., & Sivarakrishnan, L.** (2016) Measurement of land surface temperature and its relation with vegetation Cover: A case study of Kolkata Municipal Corporation. *International Journal Of Current Research*, Page : 24820-24825 ISSN No: 0975-833X
12. Sivarakrishnan L, Pahari, D.P & **Sarkar, R.** (2012) The role of urban forest in making cities sustainable Proceedings of UGC sponsored State Level seminar on environmental Degradation and Strategies for conservation and Management at Krishnagore Govt. College, Nadia, West Bengal. Pages: 8-12
13. Sivarakrishnan, L., & **Sarkar, R.** (2011) Urban sprawl and its impact on Environment: A Case study of Kolkata. *Practising Geographer* Volume: 15 No: 2 ISSN No: 0975-3850
14. **Sarkar, R.** & Mondal, M. (2010) Women Empowerment in West Bengal: A Geographical Study, *Indian Journal of Landscape Systems and Ecological Studies*, Volume: 33 No:2 Pages: 339-344 ISSN No: 0971-4170
15. Mondal, M. & **Sarkar, R.** (2010) Urban Growth in relation to Geomorphology: A Study of Tiruchirapalli City, Tamil Nadu, *Indian Journal of Landscape Systems and Ecological Studies*, Volume: 33 No:1 Pages: 373-380 ISSN No: 0971-4170.

### **Presentation**

1. **Presented paper on topic titled with “Impact of soil chemical properties on marigold production in Ranaghat-II, Nadia” on 14<sup>th</sup> IGU-UGI International Conference on Agriculture, Food, Water, Biodiversity and Health in Changing Climate (2020) organised by Department of Geography, The University of Burdwan, India.**
2. **Presented paper on topic titled with ‘Predicting land use and land cover change using Markov model: A case study of Bhagirathi – Hugli river basin’ on 7<sup>th</sup> ANGIS 2018 Conference - INDIA GIS-Connecting Geography, History and Economics.....Looking Beyond Where, organised by Department of Geography, The University of Burdwan, India.**

### **Training /Workshop**

1. Successfully participated in **Drone Mapping** using at Jadavpur University from 3/2/2020-7/2/2020
2. Successfully participated in 7 days AICTE-QIP on **Land use and Land cover Modeling using Open Sources** held at IIT, Kharagpur from 13/10/2019- 19/10/2019
3. Participated in 7 days National Faculty Development Programme (NFDP) on **Statistical Data Handling and Advanced Analytics** held at Shaheed Bhagat Singh College, University of Delhi from 02/05/2016- 08/05/2016
4. Actively participate in 21 Days Training Programme on **Advances in Land Resource Inventory for Enhancing Productivity Through Agro- Technology Transfer** at ICAR- National Bureau of Soil Survey and Land Use Planning, Kolkata held in 7/01/2015- 27/01/2015
5. Takes Course on **Geospatial Technology for Urban and Regional** in Indian Institute of Remote Sensing, Dehradun held on 15/12/2015- 26/12/2016
6. Participated on a 21 Days Training Program on **Geospatial Technology and Its Application** conducted by NRDMS, DST, GOVT. OF INDIA and Department of Geography, The University of Burdwan.
7. Takes a Course on **3D GIS and Hydrogeological Flow Modelling** organised by School of Environmental Science, Jawaharlal Neheru University, New Delhi and Alexander von Humbolt Foundation, Germany in between 10/02/2013- 12/02/2013
8. Participated in a course on **Hyperspectral Remote Sensing** conducted by IIRS, Dehradun & Jadavpur University, Kolkata held in between 13/02/2012- 30/03/2012

#### **Research Guidance:**

Ph.D supervision (Awarded) : 2

Ph.D Under Supervisor: 4

M.Sc Dissertation Supervitation -15.

#### **Resource Person**

1. In the Department of Geography, University of Raiganj, Uttar Dinajpur, West Bengal on Application of Remote Sensing and GIS in Geographical Research form 2<sup>nd</sup> – 3<sup>rd</sup> May, 2019.

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2. In the Department of Geospatial Science, The University of Burdwan, , West Bengal on Application of Remote Sensing and GIS on 22th February, 2022.