Curriculum Vitae

Dr. Mohammad Arif

Assistant Professor (T)
Department of Geography
Central University of Jharkhand
Ranchi, Jharkhand, India

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Education

❖ April 2013 - June 2018: Ph.D. from Department of Geography, Visva-Bharati (A Central University), Santiniketan, India.

Thesis title: "Socio-economic transformation in peri-urban area of Burdwan city, West Bengal: A Geographical Analysis"

Supervisor: Dr. Krishnendu Gupta, Assistant Professor, Department of Geography, Visva-Bharati (A Central University), Santiniketan, India.

❖ 2012: Master of Science (M.Sc.) in Geography from Department of Geography, Aligarh Muslim University, Aligarh, India

Dissertation title: "Urban Sprawl and Its Impact on Environment in Burdwan City, India"

Supervisor: Prof. Abdul Munir, Department of Geography, Faculty of Science, Aligarh Muslim University, Aligarh, India

* 2009: Bachelor of Science (B.Sc.) in Geography from Department of Geography, Aligarh Muslim University, Aligarh, India

Present Research Interest

- Urban Geography
- > Economic Geography
- Regional Development and Planning
- ➤ Remote Sensing & GIS

Teaching Experience

- Assistant Professor (December 2020 May 2022): Department of Geography, Central University of Jharkhand, India
- > Assistant Professor (May 2018 September 2019): Department of Arts, KL University, (NIRF Ranking 50, NAAC A++), Vijayawada, Andhra Pradesh, India
- ➤ **Teaching Associate (April 2014 March 2018)**: Department of Geography, Visva-Bharati (A Central University), Santiniketan, India.

Research Project Experience

- > Supervision of Bachelor of Arts as main supervisor for completed dissertation entitled "Health Profile and Health Care Infrastructure (A Study on Health Profile of Vinagadapa Thanda smart village)" by Ms. Revathi Srinivasulu from January to April 2019.
- > Worked as a field coordinator for a research project entitled "Evaluation Study of Rashtriya Swasthya Bima Yojana" carried out by Centre for Labour and Health Studies, V.V. Giri National Labour Institute (Ministry of Labour and Employment), Noida, India during November and December 2014 in Birbhum district of West Bengal state, India under the supervision of Dr. Ruma Ghosh.

Academic Honors or Distinctions

- Awarded **YOUNG SCIENTIST AWARD** in the International Scientist Awards on Engineering, Science and Medicine, held on 10 & 11-April 2021, Bangalore, India, Organized by VDGOOD Professional Association.
- Awarded **2020 IGCS Scholarship** for attending 15 days Indo-German Centre for Sustainability (IGCS) Winter school programme on "Sustainability in the Peri-cene: Human settlements, food, ecology and governance" from February 15-29, 2020, organized by IIT Madras, India and RWTH Aachen University, Germany and sponsored by **DAAD and Federal Ministry of Education Research**, **Germany**
- Awarded Senior Research Fellowship (SRF) by University Grant Commission, New Delhi, India in April 2016.
- Awarded prestigious Junior Research Fellowship (JRF) by University Grant Commission, New Delhi, India in April 2014.
- Editorial Board Member Journal of Humanities and Social Science Studies, United Kingdom
- > Reviewer- Geo-spatial Information Science, Taylor & Francis Publications
- **Reviewer-** The Professional Geographer, Taylor & Francis Publications
- > Reviewer- Cogent Environmental Science, Cogent Social Sciences- Taylor & Francis Publications
- ➤ **Reviewer-** Theoretical and Applied Climatology, Environment, Development and Sustainability, Geo journal-Springer

Teaching Activities

Postgraduate

| Course Title | Code | Extent of Contribution |
|---|--------------|-------------------------------|
| Fundamental of Remote Sensing and GIS | ENV/M/511040 | Teaching & Lab |
| Digital Cartography, GPS and Surveying | MGE 612060 | Teaching & Lab |
| Geographical Thought | MGE 611040 | Teaching |
| Urban Geography | MGE 621020 | Teaching |
| Agricultural Geography | MGE 711030 | Teaching |
| Himalayan Cryosphere | MGE 721010 | Teaching & Lab |

Undergraduate

| Course Title | Code | Extent of Contribution |
|--|----------|-------------------------------|
| Human Geography | 16BA1204 | Teaching |
| Geography of India | 16BA2204 | Teaching |
| Remote Sensing and Geographic Information System | 16BA3104 | Teaching |
| Contemporary Issues in Geography | 16BA3209 | Teaching |

Publications (Total Citations: 47, h-index: 4, i10-index: 1)

Articles Published

- 1. M Arif[©] (2022) Assessment of agricultural land suitability using GIS and Fuzzy Analytical Hierarchy Process approach in Ranchi District, India, Geocarto International, Taylor & Francis. 1-32. DOI: 10.1080/10106049.2022.2076925. IF: 4.88 (SCI indexed)
- 2. M Arif[©] (2021) Sub-watershed prioritization for soil erosion potentiality estimation in Tenughat catchment, India, *Geocarto International*, Taylor & Francis. 1-30, DOI: 10.1080/10106049.2021.2017008. IF: 4.88 (SCI indexed)
- 3. M Arif[®] (2021) Spatiotemporal dynamics of temperature and precipitation with reference to COVID-19 pandemic lockdown: perspective from Indian subcontinent, Environment Development and Sustainability, Springer. 23, 13778–13818, DOI: 10.1007/s10668-021-01238-x. IF: 3.21 (SCI indexed)
- 4. Arif M[®] (2020) Nexus between population density and novel coronavirus (COVID-19) pandemic in the south Indian states: A geo-statistical approach, Environment

- Development and Sustainability, Springer. 23(7), 10246–10274, DOI: 10.1007/s10668-020-01055-8. IF: 3.21 (SCI indexed)
- 5. Arif M[©] (2020) Spatial development planning in peri-urban space of Burdwan City, West Bengal, India: statutory infrastructure as mediating factors, SN Applied Sciences, Springer. 2(10), 1-19, DOI: 10.1007/s42452-020-03587-0. (Scopus indexed)
- 6. Arif M[©] (2019) Application of Graph-Based Model for the Quantification of Transport Network in Peri-Urban Interface of Burdwan City, India. Spatial Information Research, Springer, Singapore, 28(4), 447–457. DOI: 10.1007/s41324-019-00305-w. (Scopus indexed)
- 7. Arif M[©] (2019) Peri-Urban livelihood dynamics: a case study from Eastern India, Forum Geographic, Romania, XVIII (1), 40-52. DOI: 10.5775/fg.2019.012.i. (Scopus indexed)
- 8. Arif M[©] (2019) Driving forces of peri-urban growth of an Indian city: The Burdwan example, *Indian Journal of Regional Science*, Kolkata, *51*(1), *52-64*. (UGC listed)
- 9. M Arif. (2018) Quality of Age Statistics In India: An Insight Of Changing Course Of Reliability. *Journal of the Geographical Institute "Jovan Cvijić" SASA*, Serbia, *68*(3), 345-361, DOI: 10.2298/IJGI180218006A. (Scopus indexed)
- 10. Arif M[©] (2018) Mapping peri-urbanization in a non-primate city: A case study of Burdwan, India. European Academic Research, Romania, 5(11), 6065–6081. (UGC listed)

Articles under revision

1. **Arif M**[©], S Sengupta, S Mohiuddin and K Gupta (2022) **Land use and land cover dynamics** in peri urban area of Burdwan city, India: a remote sensing approach, *GeoJournal*, Springer. (Under second revision) (**Scopus indexed**)

Book Chapters

- 1. Arif M[©], S Sengupta and S Mohiuddin (2022) "Auto generated gravity canal routes for flood mitigation and groundwater rejuvenation: A study in Damodar-Barakar River basin, India". In Haroon Sajjad, Lubna Siddiqui, Atiqur Rahman, Mary Tahir, Masood Ahsan Siddiqui, (ed.), *Challenges of Disasters in Asia Vulnerability, Adaptation and Resilience*, Springer Nature, Singapore (Accepted)
- 2. **Arif M**©. and Revathi S. (2021) "**Healthcare Infrastructure of a Smart Village: A case study from Andhra Pradesh**". (Chapter 07), In Saket Kushwaha and Virendra Kamalvanshi, (eds.), *Climate Change and Agriculture (Vol. 4)*. AkiNik Publications, New Delhi. Pg. 103-119 [ISBN 978-93-91538-32-3] DOI: 10.22271/ed.book.1304
- 3. Arif M. (2019) "Understanding socio economic dilemmas of peri urban India: a case study". (Chapter 21), In Zeba Sheeren, (ed.), Growth of Indian Economy in the New

Millennium, Studium Press (INDIA) Pvt. Ltd., New Delhi. Pg. 257-276 [ISBN 978-9385046-46-9]

Invited lecture

Delivered an invited lecture on "Addressing the Role of the Vaccine in COVID-19 Prevention" in an International Webinar (Online mode) on 27th June 2021 organized by Columbia College, Raipur, Chhattisgarh, India

Professional Training and Workshop Attended

- ➤ Attended three days online training on **Disaster Preparedness and Response System Issues and Challenges from Local to Global Level** from March 10-12, 2022, organized by National Institute of Disaster Management, Govt. of India in collaboration with Department of Geography, University of Mumbai and Institute of Indian Geographers (IIG)
- Attended three days national level online workshop on **Teaching Geography** from December 15-17, 2021, organized by Department of Geography, University of Delhi
- ➤ Attended five days national level online **Workshop on Software in Mathematics and Statistics (WSMS 2021)** from August 02-06, 2021, organized by Department of Mathematics, National Institute of Technology Tiruchirappalli
- Attended three week training on **Build back better: Harnessing South South cooperation** and risk reduction planning for resilient and healthy cities in the post COVID 19 era from June 8-29, 2021, organized by UNDRR, United Nations and WHO
- ➤ Attended NASA's Applied Remote Sensing Training Program on **Using Google Earth Engine for Land Monitoring Applications** in June 16, 23 and 30, 2021, organized by National Aeronautics and Space Administration
- Attended 4 days summer school on **High-Performance and Disruptive Computing in Remote Sensing (HDCRS)** from May 31- June 3 2021, organized by IEEE GRSS
- ➤ Attended one week Online Capacity Development Workshop on **Disaster Risk Reduction Strategies and Digital Governance for Local Resilience** from April 6-13, 2021, organized by UNDRR GETI and UNITAR CIFAL
- Attended NASA's Applied Remote Sensing Training Program on Introduction to Population Grids and their Integration with Remote Sensing Data for Sustainable Development and Disaster Management in March 30 and April 6, 2021, organized by National Aeronautics and Space Administration
- > Attended 4 days International Symposium on Water Sustainability: Challenges, Technologies & Opportunities (IWSS 2021) from March 22-25, 2021, organized by UNESCO Chair in Experiential Learning for Sustainable Innovation and Development, Amrita Vishwa Vidyapeetham, Kerala and India Water Partnership (IWP).
- > Attended 1 day IEEE GRSS school on "Advanced methods for remote sensing information extraction on 5th November, 2020, organized by IEEE Geoscience and Remote Sensing Society, Norway Chapter

- Attended 5 days Quality Improvement Training Programme on **Instructional Design and Delivery System** from December 11-15, 2018, organized by KLEF (Deemed to be University) and National Institute of Technical Teachers Training & Research (NITTTR), Chennai, India
- Attended 1 day workshop on **Data Analysis with R Programme** on 28th November, 2018, organized by Academic Staff College, KLEF (Deemed to be University), Vijayawada
- Attended 6 days MHRD-GIAN training workshop on **Technology**, **Urban Space and Culture: Emerging Paradigms for the Global India** from December 8-13, 2017, organized by Indian Institute of Technology, Kharagpur, India
- Attended one-month Summer Institute programme on **Global Health and Development** from May 15 to June 15, 2015, organized by Indian Institute of Technology, Gandhinagar and University of Saskatchewan, Canada
- ➤ Attended 6 days training workshop on **Research Methodology** from March 2-7, 2015, organized by Indian Social Institute, New Delhi
- > Attended one month training course on **Introduction of GIS** from May 5-30, 2014, organized by National Remote Sensing Centre (ISRO), Hyderabad
- Attended 5 days short course on **Digital Terrain Modelling & its Applications** from November 15-19, 2008, organized by Centre for Promotion of Science, Aligarh Muslim University, India

Paper Presented in the Conference/Seminar

- 1. "Understanding Socio Economic Dilemmas of Peri-urbanization: A Case Study from Eastern India" at the International Online Conference on REVISIONING PERI-URBAN FUTURES organized by Royal Academy of Engineering, UK on October 1-2, 2021.
- 2. "Synthesizing livelihood transformation and emerging rural-urban economy in the peri-urban area of Burdwan city, India" at the XVI DGSI International Online Conference on Environment, Population & Sustainable Development organized by Centre for Geographical Studies, Aryabhatta Knowledge University, Patna, India on September 12-13, 2021.
- 3. "Healthcare infrastructure of a smart village: A case study from Andhra Pradesh" at the National Conference (online) on Climate Change and Pathways to Self-Reliant India: Opportunities and Challenges for Sustainable Development organized by Department of Geography, Faculty of Natural Sciences, Jamia Millia Islamia, New Delhi on March 15-16, 2021.
- 4. "Analysis of spatial correlation between population density and COVID-19 pandemic: Evidence from south Indian states" at the International Conference (online) on Challenges of Disaster: Vulnerability, Adaptation and Resilience organized by Centre for Disaster Management, Department of Geography, Jamia Milia Islamia, India on March 02-03, 2021.
- 5. "Sustainable land use management in Peri Urban space of Burdwan city, India: Statuary infrastructure as mediating factors" at the International Seminar on Sustainable

Development and Inclusive Growth: Methods to Methodology organized by Post Graduate Department of Geography and Department of Statistics, Lady Brabourne College, Kolkata, West Bengal, India on March 3-4, 2020.

- 6. "Issues and prospects for sustainable development planning in peri-urban interface: Glimpses from the Burdwan city" at the International Conference on Natural Resources, Environment and Development organized by Department of Economics and Politics, Visva-Bharati, Santiniketan, West Bengal, India on January 19-20, 2019.
- 7. "Structural Analysis of Transport Network in Peri Urban Area of Burdwan City, India" at the 38th INCA International Conference on Emerging Technologies in Cartography organized by National Remote Sensing Centre, Indian Space Research Organization, Hyderabad, India on October 29-31, 2018.
- 8. "Assessment of Land use land cover in peri urban area of Burdwan City, West Bengal" at the National Seminar on Recent Advances and Challenges in Geochemistry Environmental and Sedimentary Geology organized by Department of Geology, Aligarh Muslim University, Aligarh, India on February 27, 2017.
- 9. "Mapping Peri-Urbanization of Burdwan City, West Bengal: A Longitudinal Study" at the International Conference on Urban Geo-Informatics organized by TERI University, New Delhi, India on February 22-23, 2017.
- 10. "Socio-economic condition of urban poor in Burdwan city, West Bengal" at the National Conference on Interdisciplinary Researches in Social Sciences in Eastern India with special reference to Jharkhand organized by Sociological Research Unit, Indian Statistical Institute, Kolkata and Giridih, India in February 27-28, 2014.
- 11. "Rapid Urbanisation and Its Social Consequences in the Urban Poor of Burdwan City" at the 35th Indian Geographers' Meet & International Conference on Environment, Development and Equity organized by Department of Geography, The University of Burdwan, West Bengal, India held on November 11-13, 2013.

Membership of Learned Bodies

- ➤ Member, High-performance and Disruptive Computing in Remote Sensing (HDCRS), IEEE GRSS Working Group
- ➤ Member, IEEE GRSS Technical Committee Earth Science Informatics (ESI)
- ➤ **Life Member**, Indian Society of Geomatics (Membership no. ISG-L- 2277)
- ➤ **Life Member**, Indian National Cartographic Association, Hyderabad, India (Membership no. LM- 2811)
- ➤ **Life Member**, The Association for Geographical Studies, Department of Geography, University of Delhi, India (Membership no. LM- 344)
- Member, Regional Science Association, Kolkata, India (2015-2019)
- Student Member, Regional Studies Association, England (2015-16)

Key Technical Skills

GIS Packages : ArcGIS 9.3 to 10.2 and QGIS

Database Management: MS Excel, SPSS

Operating Systems : Windows 2007, 8.1, 10 and 16
Project Management : MS Project and MS Visio 2010

Secondary Data Work: World Health Organization, Census of India, National

Sample Survey Organization (NSSO), District Level Household Survey (DLHS), National Family and

Health Survey (NFHS)

Statistical Software's : SPSS, XLSTAT and R package Orcid id: https://orcid.org/0000-0003-4121-3080

Web of Science ResearcherID: AAI-1336-2019

Research gate Id: researchgate.net/profile/Mohammad_Arif16

Scopus Author ID: **57218824217**

Administrative Positions Held

Member, Board of Studies, Department of Arts, KL University for 2018-19 & 2019-20 session

- ➤ Internal Quality Assessment Cell (IQAC) in charge for 2019-20 session
- Outcome Based Education (OBE) in charge for 2019-20 session
- Exam in charge for 2019-20 session
- Result in charge for 2019-20 session
- Backward class/Minority Committee in charge for 2019-20 session
- > Student councillor for B.A I, II & III Year
- ➤ Anti-ragging committee in charge for 2019-20 session
- Class Time table in charge for 2018-19 session
- ➤ Member, Local Organizing Committee, 36th INCA International Congress on Cartography for Analysis and Management of Climate Change from 9th-11th November 2016 and Organized by Department of Geography, Visva-Bharati University, Santiniketan, West Bengal, India

Personal Data

Nationality: Indian

Date of Birth: January 22nd, 1988

Gender/ Marital status: Male/ Married

Languages proficiency: English, Hindi & Bengali

Permanent Address: 29/1, J.B. Hazra Road, Rasikpur, Burdwan, West Bengal, India, 713101

Corresponding Address: Millat Colony, Kanke, Ranchi, Jharkhand, 834006

References

1) Dr. Krishnendu Gupta (Ph.D Supervisor)

Assistant Professor

Department of Geography, Visva Bharati (A Central University), Santiniketan, India

Email: krishgupta10@gmail.com

Phone: +91-9434493166

2) Professor Md. Erfan Ali Mondal

Department of Geology, Aligarh Muslim University, Aligarh, India

Email: erfan.mondal@gmail.com

Phone: +91-9837171900

3) Dr. Prithvish Nag

Former Vice-Chancellor, Mahatma Gandhi Kashi Vidyapeeth, Varanasi, India Visiting Professor, Department of Civil Engineering, IIT-Banaras Hindu University, Varanasi, India

Email: prithvishnag@gmail.com

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