Curriculum Vitae

Dr. Praveen Kumar Rai, M.Sc., M.Tech., Ph.D.
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SPECIALIZATION: Remote Sensing, GIS, Glaciology, Hydrology,Watershed Management etc.

Personal Details:

Date of Birth: 22/02/1982 Nationality: Indian
Marital Status: Married Religion: Hindu

Objective:

To obtain a very high position with a progressive organization in the field of Remote Sensing & Geographic Information Systems and have an ambition to learn, lead and achieve the best.

Teaching Experiences:

- Working as an **Associate Professor**, **Department of Geography, K.M.C. Language University (U.P. State Government University), Lucknow**, U.P., India from 25th August 2020 to till date.
- Worked as an **Assistant Professor** of **Remote Sensing and GIS in AIGIRS, Amity University, Noida** from 2019 to 24th August 2020.
- Worked as an **Assistant Professor** of **Remote Sensing and GIS Course** in **Department of Geography, Banaras Hindu University,** Varanasi, Uttar Pradesh, INDIA (Since 25th August 2008 to 31st May 2019).
- Taught **Remote Sensing and GIS** paper to **M.Tech. in Agriculture Engineering** (3rd Semester) students of **Department of Farm Engineering, Institute of Agricultural Sciences, Banaras Hindu Universit**y from 2010-2018.

Administrative Experiences:

1) **Program Leader cum Course Corodinator** of B.Sc. (H) Geography program in AIGIRS, Amity University from April 2019 to 24th August 2020.
2) **PROVOST (Boys Hostel)**, K.M.C. Language University, Lucknow from 16th September 2021 to till date.
3) **Estates Officer**, .K.M.C. Language University, Lucknow from 15th October 2021 to 16th November 2021.
4) **Associate Dean, Faculty of Social Sciences,** K.M.C. Language University, Lucknow from 24th December 2020 to till date
5) **Chief Security Incharge**, K.M.C. Language University, Lucknow from 24th December 2021 to till date.
6) **Corodinator, RUSA**, K.M.C. Language University, Lucknow from 30th December 2021 to till date.
7) **Chief Proctor,** K.M.C. Language University, Lucknow from January 2021 to till date.
8) **Head,** Department of Geography, KMC Language University, Lucknow from 3rd February 2021 to till date.
9) **Member, IQAC,** KMC Language University from 28th January 2021 to till date.

Research Publication:

International Journal

1. Mohan, K. Shrivastava, A. & **Rai, P.K.**, 2011. Ground Water in the City of Varanasi, India: Present Status and Prospects, **Quaestiones Geographicae**, Vol. 30, No. 3, 47-60. ***DOI: 10.2478/v10117-011-0026-9.*** **ISSN**: 2081-6383.

2. **Rai, P.K.**, Nathawat, M.S. and Mohan, K. 2013. Glacier Retreat in Doda Valley, Zanskar Basin, Jammu and Kashmir, India, **Universal Journal of Geosciences,** Horizon Research Publishing, USA, Vol-1 (3), 139-149. **DOI: 10.13189/ujg.2013.010304. (ISSN: 2331-9615)**

3. **Rai, P.K.**, **Nathawat, M.S.**, Mishra, A., Singh, S.B. and Onagh, M. 2011. Role of GIS and GPS in VBD Mapping: A Case Study. **Journal of GIS Trends**. Academy Science Journals, North America, 2(1):20-27. (**ISSN:2146-0892)**. Available at **http://www.asciencejournal.net/asj/index.php/GIST/article/view/298** .

4. **Rai, P.K.**, Sweta and Mishra, A. Onagh, Mohammad., 2011. Multi Seasonal IRS-IC LISS III data for Change Detection Analysis and Accuracy Assessment: A Case Study, ***Journal of GIS Trend***. Academy Science Journals, North America, 2(2):14-19. **(ISSN:2146-0892)**.

Available at **http://www.asciencejournal.net/asj/index.php/GIST/article/view/297** .

5. **Rai, P.K.**, Nathawat, M.S., and Onagh, M. 2012. Application of Multiple Linear Regression Model through GIS and Remote Sensing for Malaria Mapping in Varanasi District, INDIA, **Health Science Journal (International Journal of Nursing Research and Review)**, Vol. 6, Issue 4, pp:731-749. **(ISSN 1791-809X**).**Available at http: *www.hsj.gr/volume6/issue4/6414.***

6. Mohammad Onagh, V.K. Kumra , **Rai P.K.** 2012. Application of Multiple Linear Regression Model in Landslide Susceptibility Zonation Mapping: The Case Study of Narmab Basin (Iran), **International Journal of Geology, Earth and Environmental Sciences**, Vol-2 (2), pp. 87-101. *Available at http://www.cibtech.org/jgee.htm* **(ISSN 2277-2081).**

7. Mohammad Onagh, V.K. Kumra , **Rai P.K.** 2012. Landslide Susceptibility Mapping in a Part of Uttarkashi District (India) by Multiple Linear Regression Method, **International Journal of Geology, Earth and Environmental Sciences**, Vol-2 (2), pp 102-120. *Available at http://www.cibtech.org/jgee.htm (*ISSN 2277-2081).

8. **Rai, P.K.**, Singh, P.K., Singh, A.K., Mohan.K., 2013. Network Analysis Using GIS, **International Journal of Emerging Technologies in Computational and Applied Sciences, (IJETCAS),** Vol. 3 (5), pp. 289-292. *Available at: www.iasir.net* **(ISSN: 2279-0055).**

9. Chaurasia, J., **Rai, P.K.** and Singh, A.K. 2013. Physico-Chemical Status of Groundwater Near Varuna River in Varanasi City, INDIA**, International Journal of Environmental Sciences** (Integrated Publication Association), Vol.3 (6), pp 2114-2121. **(ISSN: 0976-4402).**

10. **Rai P.K.**, Nathawat M.S**.** and Rai S., 2013. Using the Information Value Method in Geographic Information System (GIS) and Remote Sensing for malaria Mapping; A Case Study from India, **Informatics in Primary Care (University of Surrey, U.K.), 21(1):43–52**. *Available at: http://dx.doi.org/10.14236/jhi.v21i1.38 (ISSN 1475-9985).*

11. Rai P.K. and Nathawat M.S., 2013**.** Application of GIS & Statistical Methods to Select Optimum Model for Malaria Susceptibility Zone and Verification of the Susceptibility Methods by Area Under Curve (AUC): A Case Study, **Scientific Annals of "Alexandru Ioan Cuza" University of Iasi** – Geography series (**SciGeo Journal, Romania**), 59 (2), pp. 73-94. **(ISSN: 1223-5334**). *Available at: http://www.analegeo.uaic.ro/index.php/SciGeo/issue/view/20.*

12. Chaurasi, J., **Rai, P.K** and Mishra, P.K. 2013. Study of Macro Nutrient and Physical Status of Soil in a Part of 'Varuna River' in Varanasi, India, **International Journal of Environmental Sciences** (Integrated Publication Association), Vol 4 (4), 468-471. (DOI: 10.6088/ijes.2014040400003) **(ISSN: 0976-4402).**

13. Rai P.K. and Nathawat M.S., 2013. GIS in Health Care Planning: A Case Study from India , **Forum Geographic Journal (Romania), 12 (1), 152-163**. ISSN No:2067-4635. *Available at: http://dx.doi.org/10.5775/fg.2067-4635.2013.180.d.*

14. Rai, P.K., and Mohan, K. 2014. Remote Sensing Data & GIS for Flood Risk Zonation Mapping in Varanasi District, **Forum Geographic Journal (Romania),** Vol. 13 (1), 25-33. Available at **DOI:** http://dx.doi.org/10.5775/fg.2067-4635.2014.041.i. **(ISSN No:2067-4635)**.

15. Mishra, V. N., **Rai, P.K. and** Mohan, K. 2014. Prediction of Land Use Changes Based on Land Change Modeler (LCM) Using Remote Sensing: A Case Study of Muzaffarpur (Bihar), India, **Journal of the Geographical Institute, Jovan Cvijić" SASA (Serbia), 64 (1), 111-127**.DOI: 10.2298/IJGI1401111M. **(**ISSN: 1821-2808).

16. Rai, P.K. and Nathawat, M.S. 2014. Utilization of Health Care Services in Varanasi District: A Geographical Analysis, **Geografia, Malaysian Journal of Society and Space** (online), Vol. 10 (2), 14-33. **(ISSN: 2180-2491)**. Available at: *http://www.ukm.my/geografia/v1/?cont=v&item=2&art=449&ver=loc*.

17. Shrivastava, N. and **Rai, P.K.** 2015. An Object based Building extraction Method and Classification Using High Resolution Remote Sensing Data, **Forum Geographic Journal (Romania)**, Volume 14, Issue 1, pp. 14-21. **http://dx.doi.org/10.5775/fg.2067-4635.2015.045.i (ISSN No: 2067-4635).**

18. Rai, P.K., Mishra, S., Ahmad, A. and Mohan, K., 2014. A GIS-based Approach in Drainage morphometric Analysis of Kanhar River Basin, India, **Applied Water Science (Springer).** (**ISSN**: 2190-5495). *DOI 10.1007/s13201-014-0238-y.*

19. Shrivastava, N. and **Rai, P.K.** 2015. Automatic Building Extraction Based on Multiresolution Segmentation Using Remote Sensing Data, **Journal of Geographia Polonica** (Polland), Volume 88, Issue 3, pp. 19-33. (**ISSN**: 2300-7362).**http://dx.doi.org/10.7163/GPol.2015.26**.

20. Raju, K.N.P., **Rai, P.K.**, Mohan, K., Singh, S. and Shrivastava, A., 2015. Master Plan of a Campus: Challenges and a way through Remote Sensing and GIS, **Asian Journal of Geoinformatics (Thailand**), Vol. 15 (4), 1-10. **ISSN: 1513-6728**.

21. Rai, P.K., Mohan, K. and Mishra, V.N, Bishwari, M., Sharma, A. and Rai, S., 2016. Changing Regimes of Gangotri and Surrounding Glaciers: A Case Study of Garhwal Himalaya, India, **Remote Sensing Applications: Society and**

Environment, Vol. 3(1), 53-72. **DOI: 10.1016/j.rsase.2016.02.001. ISSN: 2352-9385**.

22. Mishra, V. and **Rai, P.K.,** 2016. A Remote sensing Aided Multi-Layer Perceptron-Marcove Chain Analysis for Land Use and Land Cover Change Prediction in Patna district (Bihar), India, **Arabian Journal of Geosciences**, Vol 9 (1). Pp.1-18. **DOI: 10.1007/s12517-015-2138-3. ISSN: 1866-7511.**

23. Rai, P.K., Mishra, V.N, & Mohan, K. 2017. A Study of Morphometric Evaluation of the Son Basin, India Using Geospatial Approach, **Remote Sensing Applications: Society and Environment, Vol. 7, 9-20**. **ISSN: 2352-9385**. **DOI: 10.1016/j.rsase.2017.05.001.**

24. Rai, P.K. and Singh, C., 2016. GIS in Electrical Asset Mapping: A Case of Bhadohi, India, **European Journal of Geography; Volume 7, Number 4:19 - 33**. **(ISSN: 1792-1341).**

25. Mishra, V.N., **Rai, P.K.**, Kumar, P. and Prashad, R., 2016. Evaluation of Land Use/Land Covers Classification Accuracy Using Multi-Temporal Remote Sensing Images, **Forum Geographic** (Romania), 15 (1), 45-53. **(ISSN No: 2067-4635)**.

26. Vishwakarma, C.S., Thakur, S., **Rai, P.K.,** Kamal, V. and Mukharjee, S., 2016. Changing Land Trajectories: A Case Study from India Using Remote Sensing, **European Journal of Geography**. Vol. 7 (2), 63-73. (**ISSN: 1792-1341).**

27. Singh, P, and **Rai P.K.** 2016. Effectiveness of Quantitative Morphometric Analysis for Water Resource Management using Earth Observation Data has been submitted in the **International Journal of Environmental Research** (Springer). ISSN: 2008-2304 (electronic version).

28. Rai, P.K. 2016. Integration of GIS with Survey Data for Electrical Asset Mapping in Robertsganj town of India, **Georeview (Romania**), Vol. 26 No. 1 pp. 1-17. ISSN: 1583-1469.

29. Rai, P.K. and Adinehvand, M. 2016. Assessment of Nutritional Status and Deficiency Disease through Geographical Survey: A Case Study of Varanasi District in India, **Forum Geographic Journal (Romania)**, Vol. 15 (2), pp. 218-226. DOI: http://dx.doi.org/10.5775/fg.2067-4635.2016.361.d. **(ISSN No:2067-4635)**.

30. Rai, P.K., Chaubey, P.K., Mohan, K. & Singh, P. (2017). Geoinformatics for assessing the inferences of quantitative drainage morphometry of the Narmada Basin in India, **Applied Geomatics (Springer)**, 1-23. DOI:10.1007/s12518-017-0191-1 **ISSN: 1866-9298.**

31. Mărgărit M. Nistor, Ronchetti, F., Corsini A., Cheval S., Dumitrescu, A., **Rai P.K.,** Petrea, D., Dezsi S.. 2017. Crop evapotranspiration variation under climate change in South East Europe during 1991-2050, **Carpathian Journal of Environmental Science**, Vol. 12, No.2, pp.571-582. (ISSN Online: **1844 - 489X).**

32. Rai, P.K., Mishra, V.N., Singh S. Prasad, R. and Nathawat, M. 2017. Remote sensing based study for evaluating the changes in glacial area: A case study from Himachal Pradesh, India, **Earth Systems and Environment (Springer)**, Vo. 1 (1), pp.1-13. DOI 10.1007/s41748-017-0001-2. ISSN: 2509-9434 (electronic version).

33. Rai, P.K. and Mishra, V.N. 2017. Changes of Glacier Lakes Using Multi-Temporal Remote Sensing Data: A Case Study from India, **Geographica Pannonica, Vol. 21 (3), 132-141**. **ISSN: 1820-7138 (online).**

34. Nistor M.M., Petrea D., **Rai P.K.**, Dezsi S., Hognogi, G. 2017. Climate change impact on crop evapotranspiration in Turkey during 21st century, Meteorological Application; 2018, 1–12. DOI: https://doi.org/10.1002/ met.1774. ISSN: 1469-8080

35. Mishra V.N., Prasad R., Kumar P., Srivastava P.K., **Rai, P.K.** 2017. A knowledge based decision tree approach for mapping spatial distribution of rice crop using C-band SAR derived information, **Journal of Applied Remote Sensing**, 11 (4), 46003-1-18. **E-ISSN:** 1931-3195.

36. Mishra, V.N., Prasad R., Nistor M.M. and **Rai, P.K.** 2017. Using remote sensing technique to investigate land use/ land cover changes in Varanasi district (U.P.), India has been accepted in **European Journal of Geography**.

37. Adinehvand, M., **Rai, P.K.** & Mindrescu, M. 2017. Remote Sensing Data and GIS application for Landslides Mapping: A Case Study from India, **Georeview, Vo1.27 (1), 1-15. DOI:** http://dx.doi.org/10.4316/GEOREVIEW.2017.27.1.370.

38. Singh P.K. and **Rai P.K.** 2017. Integrating Hydrological Information with Morphometric Component of Krishi River Basin for Water Resource Management of Alluvial Plain has been accepted in **Applied Geomatics** (Springer).

39. Singh, P.K. and **Rai, P.K.** 2017. Landslide Prediction Mapping through Frequency Ratio (FR) model using GIS and Earth Observation Data Sets: A Case Study of Part of Northern Uttrakhand (India) has been submitted in **Natural Hazard (Springer). ISSN: 1573-0840** (Online).

40. Singh, S. and **Rai, P.K.** 2017. Application of Earth Observation Data for Estimation of Changes in Land Trajectories in Varanasi District, India, **Journal of Landscape Ecology**. ISSN: 1805-4196. DOI: 10.1515/jlecol-2017-0017.

41. Kumar, P., Rai, V.K. & **Rai, P.K**., 2017. Assessment of Pollution Status with Respect to Up and Down Stream Influences of Gomti River in Jaunpur City, India, **Georeview**, Vol. 27 (1), 51-62. DOI: http://dx.doi.org/10.4316/GEOREVIEW.2017.27.1.377.

42. **Rai, P.K.,** Mishra, V.N. and Singh, P. 2018. Hydrological Inferences through Morphometric Analysis of Lower Kosi River Basin of India for Water Resource Management based on Remote Sensing Data, **Applied Water Science** (Springer), 8:15, 1-16. DOI: https://doi.org/10.1007/s13201-018-0660-7. **ISSN: 2190-5495.**

43. Mishra, V.N., **Rai, P.K.,** Rajendra, P. and Puniya, M. & Nistor, M.M. 2018. Prediction of spatio-temporal land use/land cover dynamics in rapidly developing Varanasi district of Uttar Pradesh, India, using geospatial approach: a comparison of hybrid models, **Applied Geomatics (Springer).** ISSN No. 1866-9298. DOI: https://doi.org/10.1007/s12518-018-0223-5.

44. Sharma, A., Singh, P. & **Rai, P.K.,** 2018. Morphotectonic Analysis of Sheer Khadd River Basin Using Geospatial Tools, **Journal of Spatial Information Research**, 26 (4), 405-414. **ISSN: 2366-3294.**

45. Mishra, V.N., Prashad, R., **Rai, P.K.**, Vishwakarma, A,K, Arora, A., 2018. Evaluation of textural features in improving land use/land cover classification accuracy of heterogeneous landscape using multi-sensor remote sensing data, **Earth Science Informatics**, 2019, Volume 12, Issue 1, pp 71–86. DOI: https://doi.org/10.1007/s12145-018-0369-z. ISSN: 1865-0481.

46. Dezsi, S., Mîndrescu, M., Petrea, P., **Rai, P.K.**, Hamann, A., Nistor, M.M., 2018. High-resolution projections of evapotranspiration and water availability

for Europe under climate change, **International Journal of Climatology**, 38:3832–3841.

47. **Rai, P.K.,** Singh, P., Mishra, V.N., Singh, A., Sajan, B. Shahi, A.P., 2019. Geospatial Approach for Quantitative Drainage Morphometric Analysis of Varuna River Basin, India, **Journal of Landscape Ecology**, 12 (2), 1-21.
48. Nistor, M.M., Rai, P.K., Dugesar, V., Mishra, V.N., Singh,P, Arora, A., Kumra, V.K., Carebia I.A. 2019. Climate change effect on water resources in Varanasi district, India, **Meteorological Application**, 1-16. DOI: 10.1002/met.1863
49. Shastri, S., Singh P., **Rai, P.K.** 2020. Â Land covers change dynamics and their impacts on thermal environment of Dadri Block, Gautam Budh Nagar, India. **Journal of Landscape Ecology**, 13 (2), 1-13.
50. Singh, P., Sharma, A., Sur, U., **Rai, P.K.,** 2020. Comparative landslide susceptibility assessment using statistical information value and index of entropy model in Bhanupali Beri region, Himachal Pradesh, India, **Environment Development and Sustainability**, 1-20. DOI: https://doi.org/10.1007/s10668-020-00811-0. ISSN: 1573-2975.
51. Shastri, S., Singh,P., ,Verma,P., **Rai, P.K.,** Singh, A.P. 2020. Assessment of spatial changes of land use/land cover dynamics, using multi-temporal Landsat data in Dadri Block, Gautam Buddh Nagar, India, **Forum Geographic**, Volume XIX, Issue 1 (June 2020), pp. 72-79. DOI: http://dx.doi.org/10.5775/fg.2020.063.i
52. Sur, U., Singh, P., **Rai, P.K.** 2021. Landslide Probability Mapping by considering Fuzzy Numerical Risk Factor (FNRF) and landscape change for road corridor of Uttarakhand, India, **Environment, Development and Sustainability (Springer), 1-29.** DOI: https://doi.org/10.1007/s10668-021-01226-1.
53. Singh, A., **Rai, P.K.,** Deka, G., Biswas, B., Prasad, D., Rai, V.K. 2021. Management of natural resources through integrated watershed management in Nana Kosi micro watershed; district Almora, India, **Eco. Env. & Cons**. 27 (February Suppl. Issue) : 2021; pp. (S260-S268). ISSN 0971–765X.
54. Rai, V.K., Kumar, P., Singh, A., Prasad, D., **Rai, P.K.** 2021. GIS based analysis of distribution of heavy metal pollutants in India: sources, toxicity and their mitigation, **Poll Res**. 40 (1) : 237-243. ISSN 0257–8050.

National Journals

1. **Rai, P.K.,** Nathawat, M.S., Anurag, N., 2008. **T**emporal Behavior of Waterlogged Area using Multi-Temporal Satellite Data, **Deccan Geographer (*The Journal of Deccan Geographical Society)***, Vol. 46, No. 2, 67-74. (**ISSN**: 0011-7269)
2. **Rai, P.K.**, Nathawat, M.S., Pandey, A.C., Raju, K.N.P., 2009. Morphometric Characteristics of Glaciers in Doda Valley, Jammu and Kashmir**, *Transaction of Institute of Indian Geographer***, Vol. 31, No. 2, 136-141. (**ISSN**: 09709851).
3. **Rai, P.K.**, Nathawat, M.S., Pandey, A.C., 2009. Glacier Domain Mapping using Digital Image Processing, ***National Geographical Journal of India (NGJI), Banaras Hindu University,*** Vol. 55, No. 2, 47-52. (**ISSN:** 0027-9374).
4. **Rai, P.K.,** Rai, V.K., 2009**.** Land Use Mapping Using Remote Sensing & GIS Techiniques in a Part of Son Basin, Sonbhadra District, U.P., INDIA**, *GIS Development (Online)*, Vol. 5 (November 2009) issue 43. (ISSN:** 2277-3134**).**
5. **Rai, P.K.,** Topo, N., Nathawat, M.S., 2009. Hydrogeomorhological Mapping for Ground Water Prospects Evaluation Using Remote Sensing Data**, *Journal of Institute of Landscape, Ecology, Ekistics, Kolkatta University*, Vol. 32 (2), 257-266. (ISSN:** 0971-4170**).**

6. **Rai, P.K.,** Singh, S., Arora, A., Kumar, P., 2009. Village Information System Using High Resolution Remote Sensing Data**,** ***National Geographer,*** **Department of Geography, Allahabad University, Vol. XLIV, No. 1+2, 29-34. (ISSN:** 0470-0929).
7. **Rai, P.K.,** Kumar, R., 2010. Classification Techniques for Identification of Waterlogged Area Using Remote Sensing Data**,** ***Journal of Scientific Research, Faculty of Science, Banaras Hindu University,*** **Vol. 54, 15-19. (ISSN No.** 0447-9483**).**
8. **Rai, P.K.,** Nathawat, M.S., Singh, S.B., 2011. GIS and GPS in Vector Born Disease Mapping, Magadh Geographer (***Magadh Geographical Review),*** **Vol. X, No. 1, 59-71**. (**ISSN No**.0975-489X).
9. **Rai, P.K.** & Kumra, V.K., 2011. Role of Geoinformatics in Urban Planning, **Journal of Scientific Research, Faculty of Science, Banaras Hindu University, Vol. 55, 11-24.(ISSN No.** 0447-9483**).**
10. **Rai, P.K**., Nathawat, M.S., Singh, S.B., 2011. Role of GIS in Analyzing the Distribution of Health Care Services, **National Geographical *Journal* of India (NGJI), Vol. 57, No. 3, 15-24.** (**ISSN:** 0027-9374).
11. **Rai, P.K.,** Nathawat, M.S., Mohan, K., 2012. Geo-Aspect Analysis an Area Altitude Distribution of Glaciers Doda Valley, Zanskar Basin, Jammu & Kashmir, India, **National Geographical *Journal* of India,** Vol. 58 No.4**, 107-116.** (**ISSN:** 0027-9374).
12. **Rai, P.K.,** Mohan, K. and Kumra, V.K., 2014. Landslide hazard and its mapping using Remote Sensing & GIS Techniques, **Journal of Scientific Research, Faculty of Science, Banaras Hindu University,** Vol. 58, 1-13. **(ISSN No.** 0447-9483**).**
13. **Rai, P.K.** and Mohan, K. 2014. Remote Sensing Perspective for Large River Valley Projects in Indian Context **'Prajna' Journal (Special issue on Science & Technology), Banaras Hindu University (India), 60 (2), 25-33**. **ISSN: 05549884**
14. **Rai, P.**K., Singh, S. and Mohan, K. 2015. Land Use Change Detection Using Multi-Temporal Satellite Data: A Case Study of Haridwar District, Uttrakhand, **Journal of Scientific Research**, Faculty of Science, Banaras Hindu University, 59 (1 & 2), 1-16. **(ISSN No.** 0447-9483**).**
15. **Mishra, V.N.** and Rai, P.K. 2015. Surface Generation through Geostatistical Techniques (Kriging), **Journal of Scientific Research**, Faculty of Science, Banaras Hindu University, 59 (1 & 2), 17-30. **(ISSN No.** 0447-9483**).**
16. **Rai, P.K.,** Mishra, V.N., & Raju, K.N.P., 2018. Methodology and Application of Remote Sensing & GIS in **Environmental Mapping & Monitoring**, NGJI, 64 (1 & 2), 266-276.

Book Published:

i) **Rai, P.K. &** Nathawat, M.S., 2013. **Remote Sensing & GIS in Glacier Mapping**, (LAP) Lambert Academic Publishing, Germany (ISBN No. 978-3-659-43454-9), **1-109**.

Available at: https://www.morebooks.de/store/gb/book/remote-sensing-gis-in-glacier-mapping/isbn/978-3-659-43454-9.

ii) **Rai, P.K.**, 2013. **Remote Sensing Data in Land Use Mapping**, (LAP) Lambert Academic Publishing, Germany (ISBN: 978-3-659-48546-6), **1-84**.

Available at: https://www.morebooks.de/store/gb/book/remote-sensing-data-in-land-use-mapping/isbn/978-3-659-48546-6.

iii) Kumar, S., Azad, C and **Rai, P.K. Land Degradation Assessment Using Geospatial Technology, (**LAP) Lambert Academic Publishing, Germany (ISBN No. 978-3-659-34129-8), 1-80.
Available at: https://www.morebooks.de/store/gb/book/land-degradation-assessment-using-geospatial-technique/isbn/978-3-659-34129-8.

iv) **Rai, P.K.** and Nathawat, M.S. 2017. Geoinformatics in Health Facility Analysis, Springer International Publishing, Switzerland **ISBN** (Hard copy): 978-3-319-44623-3., **eBook ISBN:** 978-3-319-44624-0.
url: http://www.springer.com/gp/book/9783319446233
DOI: 10.1007/978-3-319-44624-0.

v) **Rai, P.K.** Mishra, V.N., Singh, P. 2021. Recent Technologies for Disaster Management & Risk Reduction-Sustainable Community Resilience & Responses (edit. Book) is accepted by Springer Nature.

vi) **Rai, P.K.** Mishra, V.N., Singh, P. 2021. Geospatial Technology for Landscape and Environment Management: Sustainable Assessment & Planning (edit. Book) is accepted by Springer Nature.

vii) Mishra, **V.**N., **Rai, P.K.,** Singh, P. 2021. **Geo-information Technology in Earth Resources Monitoring and Management** (edit. Book) is accepted by Nova Science Publishers, U.S.A.

Chapter in Book:

i) **Rai, P.K.,** 2015. Malaria Susceptibility Mapping: A Geospatial Approach Geospatial Technology : Applications in Natural Resource Appraisal & Management (edt. book) R. K. Books, Dariya Ganj, Delhi,2015, ISBN-978-93-82847-45-8.

ii) Nathawat, M.S., Pandey, A.C., **Rai, P.K.** & Bahuguna, I.M., 2008. Spatio-Temporal Dynamics of Glaciers in Doda Valley, Zanskar Range, Jammu & Kashmir, India in Proceeding of International Workshop on Snow, Ice, Glacier and Avalanches, in CSRE, IIT Bombay, Tata McGraw-Hill, Jan 7-9, 2008.
ISBN: 978-0-07-024893-9.

iii) Sharma, A., Sur, U., Singh, P., Rai, P.K., Srivastava, P.K., 2020. Probalistic Landslide hazard assessment using statistical information value (SIV) and GIS techniques: a case study of Himachal Pradesh, India in Techniques for Disaster Risk Management & Mitigation (edt. book) by Shrivastava P.K. et.al., International John Willey & Sons. Inc. Online ISBN:9781119359203, https://doi.org/10.1002/9781119359203.ch15

iv) **Rai, P.K.**, Singh, P., Mishra, V.N., Shahi, A.P., Singh, A., Sajan, B., 2019. Remote Sensing Based Analysis on Environmental and Climatic Impact on Resources in Alaska Region: A Review has been accepted in (ed. Book) "Alaska: Social, Economics, and Environment", 2nd Edition by Nistor, M.M. NOVA Science Publisher, New York,

Abstract or Paper published in Symposium/Seminar/Workshop/Conferences

i) Rai, P.K., Nathawat, M.S., Pandey, A.C., Bahuhuna, I.M., (2008), "Spatio Temporal Dynamics of Glaciers in Doda Valley, Zanskar Basin, J & K" published in International workshop on snow, ice, glacier & avalanches organized by CSRE, IIT Bombay. Publishers: T & MH, New Delhi.

ii) Rai, P.K., Nathawat, M.S., Pandey, A.C., (2008), "Satellite based Glaciers Morphometry in Doda basin, Zanskar valley, J & K" published in National seminar on Geomorphology in

disaster mitigation and management organized by Department of Geography, Banaras Hindu University, Varanasi.

iii) Rai, P.K., Nathawat, M.S., Pandey, A.C., (2008), "Glacier Hazard Monitoring Using Remote Sensing data" published in National seminar on Geomorphology in disaster mitigation and management organized by Department of Geography, Banaras Hindu University, Varanasi.

iv) Rai, P.K., Nathawat, M.S., Pandey, A.C., (2008), "Comparative Evaluation of Image Processing and visually interpreted glacier inventory in a part of Doda valley, Zanskar basin, J & K" published in National seminar on Geomatics in Disaster Mitigation and Management organized by Indian Society of Geomatics, Bhopal.

v) Rai, P.K., Kumar Rajneesh, Nathawat, M.S., (2008), Spatio- Temporal Dyanamics of Waterlogged Area published in XXXth Indian Geography Congress organized by Department of Geography, University of Allahabad, Allahabad, INDIA.

vi) Rai, P.K., Nathawat, M.S., (2009), Wasteland Mapping using Remote Sensing & GIS Techniques published in 6th International Symposium on Digital Earth organized by Centre for Earth Observation and Digital Earth, CAS, Beijing, China.

vii) Rai, P.K. Verma A. (2010), Geospatial Technology for Mapping and Mitigation of Landslide Hazard in a Part of Garhwal Himalaya published in International Conference on Strategic Management of Energy, Environment and Disaster for Sustainable Development organized by FMS, B.H.U. Varanasi, 11th Jan-15th Jan 2010.

viii) Rai, P.K., 2010. "Role of GIS in Urban Planning" presented in the National Seminar on Application of GIS for Resource mapping and Planning organized by Bareilly College, Bareilly, U.P., India.

ix) Rai, P.K., 2010. "Role of GIS in Health Care" presented in the National Seminar on Application of GIS for Resource mapping and Planning organized by Bareilly College, Bareilly, U.P., India.

x) Rai, P.K., 2010. "GIS in Urban Planning and Health Facilities Analysis" presented in the National Seminar on Research in Geography: Debate on Issues and Solutions organized Department of Geography, BHU, Varanasi, U.P., India.

xi) **Rai, P.K.** (2012). Attended National Conference on "Reorienting Geography to Meet at Present and Future Challenges" in Department of Geography, B.H.U. from 14-16 March 2012.

xii) **Rai, P.K.** (2016). How safe is Varanasi Region from Seismic Sock published in National Seminar on "Geographies of Varanasi and Environs" organized by Department of Geography, B.H.U., Varanasi during 11-13 March 2016.

xiii) **Rai, P.K.** (2018). "Changing Regimes of Glaciers in Garhwal Himalayan Region Using Remote Sensing**"** in International Geographical Union Thematic Conference (Practical Geography and XXI Centaury Challenges from 4-6 June 2018.

xiv) Kumra, V.K., Shahi, A.P. and **Rai, P.K.** 2018. "Geospatial Technology in Landslide Mapping: A Case Study of Uttrakhand Himalaya, India" in International Geographical Union Thematic Conference (Practical Geography and XXI Centaury Challenges from 4-6 June 2018.

Invited Lectures:

i) Delivered an invited lecture on the topic "Digital Image Processing & Resource Management" in Summer Training Programme on Geospatial Technologies and Applications" on 24/09/2012 organized by Department of Geography, D.D.U., Gorakhpur University.

ii) Delivered an invited lecture on the topic "DEM Structure, Characteristics & Application" and "Creation of DEM & DTM, Slope & Aspect Map" in Summer Training Programme on Geospatial Technologies and Applications" on 30/09/2012 organized by Department of Geography, D.D.U., Gorakhpur University.

iii) Delivered an invited lecture on Applications of RS & GIS Tools in Environmental Applications on 9 March 2014 in "Graduate Seminar on Environment & Sustainable Development organized by IESD. BHU, Varanasi' from 8-9 March, 2014.

iv) Delivered a key note lecture on " An Analysis of Remote Sensing and GIS for Vector Born Disease Mapping" in International Congress on Vector Born Disease and Climate Change

in School of Public Health, Tehran University of Medical Sciences, Tehran, Iran (December 3-5, 2017).

v) Delivered a key note lecture on "Inventory and Retreat of Glaciers of Garhwal Himalayan Area Using Remote Sensing Data" in 5th Annual International Conference on Challenges & Solutions for a Sustainable Environment" in SGVU, Jaipur from 09-11 February 2018.

vi) Delivered a key note lecture on "Remote Sensing & GIS Application in Geographical Studies in One Day Symposium on Remote Sensing & GIS Application in Geographical Studies, Department of Geography, JPU, Chappra, Saran on 30th January 2018.

vii) Delivered a key note lecture on "Applications of Remote Sensing and GIS" in National Conference on Applications of New Techniques in Modern Geography" in Raja Harpal Singh P.G. College, Singramau, Jaunpur, U.P. from March 7-8th 2018.

viii) Delivered an invited lecture on "Geospatial Application in Urban Planning" on 12th January 2019 in One week AICTE sponsored QIP and CEP Course on "Principles and Applications of GIS" from 7-12 Jan.2019 organized by Department of Civil Engineering, IIT (BHU), Varanasi.

ix) Delivered a key note lecture on "Remote Sensing & Image Processing Applications in Rural/Urban Development/Planning" on 24th June 2019 in "Faculty Development Programme" organised by ABESIT, Gaziabad (Affiliated to Dr. AKTU, Lucknow).

x) Delivered an invited lecture on "Application of Geoinformatics in Natural Resource Management" on 6th International Conference on Recent Perspectives on Climate Change and Sustainable Development from 8-10th November 2019 organized by Centre for Climate Change & Water Research, SGUV, Jaipur.

xi) Delivered a keynote lecture on "Geospatial Analysis of Vector Born Disease Transmission: A Case Study form India"on 2nd International Conference of Vector Born Diseases and Climate Change from 13-15th November 2019 organized by Shiraz University of Medical Sciences, Shiraz, Iran.

Country Visited: Tehran (Iran), Peru (South America), Moscow (Russia), Shiraz (Iran), Dubai, Africa.

Academic Achievements and Training Attended:

- ✓ **1st Rank** holder in the M.Tech**.**
- ✓ Certificate of **EDUSAT** based training course (from 19/09/07 to 03/12/07) on **"Remote Sensing, Geographical Information System and Global Positioning System"** conducted by **IIRS (NRSA), Department of space,** Government of India.
- ✓ Certificate to attend 12 days training course on **"Radar Remote Sensing and Its Application" (RISAT-UP)** conducted by **IIRS (NRSC), ISRO, Department of Space,** Government of India.
- ✓ Certificate to attend 2 days GIS training program on **"Introduction to Arc GIS 9.3"** from 27th January to 28th January, 2009 conducted by **ESRI INDIA** in **Department of Geography, Banaras Hindu University.**
- ✓ Certificate to attend 12 days (2-11 August, 2011) training course on **"Heperspectral Remote Sensing for Agriculture (HYPERAGRI) organized by DST, Department of Agricultural Physics IARI, New Delhi.**
- ✓ Certificate on training course (from 27/01/2015 to 27/03/2015) on **"Applications of remote sensing & GIS for Natural Resources"** conducted by **IIRS (NRSC), Department of space,** Government of India.
- ✓ Certificate of training course (from 10th August 2015 to 27th November 2015) on "**Remote Sensing, GIS and GPS**" conducted by **IIRS (ISRO), Dehradun, Department of Space**, GOI.
- ✓ Certificate of Training course (from 11th February 2016 to 15th March 2016) on "**Geospatial technologies in Urban Planning"** conducted by **IIRS (ISRO), Dehradun, Department of Space**, GOI.

- ✓ Certificate of Training course (from 11th February 2017 to 10th March 2017) on "**Remote Sensing & GIS Applications in Carbon Forestry"** conducted by **IIRS (ISRO), Dehradun, Department of Space**, GOI.
- ✓ Certificate of Training course (from 22nd May 2017 to 9th June 2017) on "**Remote Sensing & GIS Applications in Water Resource Management"** conducted by **IIRS (ISRO), Dehradun, Department of Space**, GOI.

Educational Qualification:

S. No.	Name of Exam	Board/Univ	Year of Passing	% of Marks	Subject Taken
1	**Ph.D. in Remote Sensing & GIS**	Birla Institute of Technology Mesra	**2012/13**		Remote Sensing, GIS/Geoinformatics
2	**MTech. in Remote Sensing**	Birla Institute of Technology Mesra	2008	CGPA- 8.75 or 87.5%	Remote Sensing, GIS etc.
3	**MSc. in Geography**	Banaras Hindu University	2006	CGPA-7.88 or 74.30%	Geography Specialization -Remote Sensing & Advanced Cartography
4	**BSc. in Physics, Maths, Geography (H)**	Banaras Hindu University	2004	69.7%	Physics, Maths, Geography (Hons.)

Seminar/Conference/Webinar Conducted:

1. Organized Fourteen Days (11-25 June 2020) Special Lecture/International Webinar on "Application of Geospatial Technology" in AIGIRS, Amity University, Noida as a Convener.
2. Organized Five Days (26-30th June 2020) National Webinar on "Advance of Geospatial Technologies" in AIGIRS, Amity University, Noida as a Co-Convener.
3. Organized Five Days (8-12th October 2020) International Webinar on "Paradigm Shift in Geographical Research" in Department of Geography, K.M.C. Language University as a Convener.
4. Organized Two Days (20-21st October 2020) National Webinar on "Research Methodology Using SPSS Software" in Department of Geography, K.M.C. Language University as a Convener.

Research Skills:

- ✓ Geographic Information system, Digital Image Processing, Optical Data Interpretation, Microwave and Radar data Interpretation, Photogrammatery, Cartography, Remote Sensing. GPS Survey etc.
- ✓ Worked with Remote Sensing data of LISS-III, LISS-IV, Landsat, Catosat-I, IKONOS, ENVI Sat, RADAR Sat etc.
- ✓ Jobs Done: Extraction of Thematic Information from Remote Sensing Data, Data Import, Geometric Correction and Geo-referencing of Data in ERDAS, Enhancements, Subsetting, Vegetation Indices, Supervised and Unsupervised Classifications, Recoding, Map Composition, Thermal and Microwave Data Interpretation, DEM and 3D Creation etc. Georeferencing in Arc GIS, Creation of PGDB, Creation of Shape Files, Layers, Coverage's,

On-Screen Digitization of Polygons, Points and adding Attributes, Conversions, Cleaning, Building and Topology, Spatial Modeling and Analysis, Network analysis, Query building,

- ✓ TIN/DEM models and derivatives, 3 D Creation, DGPS and Total Survey Survey and Data Plotting, etc

Software Proficiency:

Software Knowledge:	Erdas Imagine- (V. 9.2), Envi (V. 4.2), IDRISI
(GIS & IMAGE PROCESSING)	Arc view (V. 3.2a), Arc GIS (V. 9.3), QGIS
	Map Info (V. 7.0), Auto CAD.
DGPS and Total Station:	Leica Geo-office, Leica Flax office.

Other Skills:

- Good Technical writing, presentation & communication skills and leading capability.
- Can work flexibly under pressure & deadlines and have good problem solving skills.

References:

1. Dr. M.S. Nathawat
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2. Dr. S.B. Singh
Professor & Ex Head, Department of Geography
BHU, Varanasi-221005, U.P., INDIA
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3. Dr. V.K.Kumra
Professor of Geography &
Former Registrar of BHU
Varanasi-221005, U.P., INDIA
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Declaration

I hereby declare that all the statements made in the Curriculum Vitae are true to the best of my knowledge and belief.
Place: Varanasi, INDIA
Date: **Praveen Kumar Rai**