◆ MODERN EDUCATION SOCIETY'S ◆

NOWROSJEE WADIA COLLEGE, PUNE

FACULTY ACADEMIC PROFILE

Tushar Prakash Raut

• Assistant Professor • Geography

Highest Qualification: M.A., NET, SET, PhD [Pursuing].

Specialization: Geomorphology

Official College Email: tusharraut@nowrosjeewadiacollege.edu.in

PROFESSIONAL SNAPSHOT

I, Tushar P. Raut a faculty member in Geography with an academic and research background in **Geomorphology, Hydrology, Environmental Geography, Geographic Information Systems (GIS), and Remote Sensing**. My teaching and academic interests and experience of more than 10 years encompass **Physical Geography, Geomorphology, Fluvial Geomorphology, Hydrology, Environmental Geography, GIS and Remote Sensing, Geospatial Techniques, and Disaster Management**. My key academic and research contributions include studies on **river-channel morphology, meander and chute-channel development, flood susceptibility and risk assessment, watershed morphometry, rainfall–runoff relationships, drainage characteristics, and structural controls on drainage networks**.

EDUCATION

Qualification	University / Institution	Year
PhD in Geography	Savitribai Phule Pune University, Pune (India)	Pursuing since 2022
Masters in Geography	Savitribai Phule Pune University, Pune (India)	2016
Bachelors in Geography	Sant Gadge Baba Amravati University, Amravati (India)	2014

TEACHING & ACADEMIC INTERESTS

Tushar Raut is a Geography faculty member and doctoral researcher at Savitribai Phule Pune University, specializing in Geomorphology, Hydrology, GIS and Remote Sensing, and Environmental Geography. His teaching focuses on Physical Geography, Geomorphology, Geospatial Techniques, Disaster Management, and environmental applications of GIS and remote sensing. He has experience in teaching, field-based research, watershed analysis, river morphology, flood-risk assessment, and hydrological studies. His key research contributions include studies of meander and chute channels, flood impacts, watershed morphometry, drainage characteristics, and geomorphic processes, particularly in the Upper Krishna River Basin of Maharashtra. Also Worked with **Balbharati as a Cartographer**, contributing to the preparation of educational maps and cartographic materials. Presented research papers at **national and international conferences** and actively contributes to research, seminars, workshops, examinations, student projects, internships, and geospatial skill development.

RESEARCH & PUBLICATIONS | OPTIONAL

Research Area: Geomorphology, Fluvial Geomorphology, Hydrology, GIS & Remote Sensing, Watershed Analysis, Flood Risk Assessment, Environmental Geography, and Geospatial Applications.

Selected Publications:

1. Rendering lineament induced stream alignment in Upper Krishna Basin, India: a geospatial approach, in the Springer Nature's Journal of Discover Geoscience 2 (1), 1-13. (Peer Reviewed)

2. Assessing Basin Characteristics in the Mula-Mutha Watershed: Using Sub-Basin Morphometry and Principal Component Analysis, A.A. Dhorde, T. P. Raut, A.G. Dhorde, N. Gautam, Springer Nature's Geography and Natural Resources, (2025), 46(1), 186-197. (IF 0.5).
3. A Sub-basin Level Assessment for Discharge Contribution to Floods in Upper Krishna River Basin, Maharashtra: A Geospatial Approach, in the Journal of Indian Geomorphology, 11 (ISSN 2320-0731), 20. (UGC Care Listed)

Research Profile:
ORCID: https://orcid.org/0000-0001-8683-8581
Google Scholar: https://scholar.google.com/citations?user=QCvUBS0AAAAJ&hl=en
ResearchGate: https://www.researchgate.net/profile/Tushar-Raut-4?ev=hdr_xprf
LinkedIn: www.linkedin.com/in/tushar-raut-31219a198

ACHIEVEMENTS & PROFESSIONAL DEVELOPMENT | OPTIONAL

Certification / FDP / Workshop:

1. Successfully completed a **One-Week MS-DEED Faculty Development Programme** held from **28 July 2025 to 2 August 2025**.
2. Participated and successfully completed "Basic of RS GIS & GNSS" course conducted by IIRS Dehradun from 2021-08-16 to 2021-11-26.
3. Participated and successfully completed the e-Training on "Basics of Image Interpretation" conducted by PGRS Division of GSI Training Institute, Hyderabad from 22.02.2021 to 24.02.2021.
4. Attended the induction program held at Indian institute of Science Education and Research (IISER) Pune from 1st May to 26th May 2018. (Equivalent to Orientation Course by MHRD).
5. Participated in the online training programme on "Remote Sensing for disaster management" on 12 Aug 2021 organized by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India.

Conferences:

1. Presented Research Paper at the 37th National Conference of the Indian Institute of Geomorphologist (IGI) From 02-04 September 2025 organized by Department of Geography and Disaster Management, University of Kashmir, Shrinagar, India, on the topic "Sinuosity Index as a Diagnostic Tool for Flood Susceptibility in Bedrock Controlled Rivers : Insight from the Upper Krishna River Basin, Maharashtra".
2. Presented Research Paper at the 36th National Conference of the Indian Institute of Geomorphologist (IGI) From 11-13 January 2025 organized by Department of Geography, Maharshi Dayanand University, Rohtak, Haryana, India, on the topic "Rendering Lineament Induced Stream Alignment in Upper Krishna Basin, India: A Geospatial Approach".
3. Presented a Paper at 45th Indian Geography Congress International Conference of the National Association of Geographers, India (NAGI) on 14th to 16th December 2023, entitled "A Geospatial Analysis of Sub Basins for Discharge Contribution in the Upper Krishna River Basin, Maharashtra, India.
4. Presented a paper in 34th annual conference of the Indian Institute of Geomorphologist (IGI) on 2nd to 4th Nov. 2022 at 'Yong Geomorphologist Competition' entitled, Flood mapping and Estimation of agricultural losses using geospatial technique: A case study of Krishna flood 2019 – Maharashtra.
5. Presented a paper entitled, "Lineament extraction to identify its impact on drainage network in Upper Krishna River Basin Maharashtra" in 32nd annual conference of the Indian Institute of Geomorphologist (IGI) on 21st to 23rd Jan 2021.
6. Presented a paper on "Application of Compound Factor Technique for Identification of Sub-Basins Influencing on flood Discharge in Upper Krishna River, Maharashtra." in the IGS - International E-Conference on "EARTH SCIENCES AND SUSTAINABLE DEVELOPMENT GOALS" Conducted from 5th to 7th August, 2021 by Dept of Geography, Osmania University, Hyderabad, Telangana in Collaboration with the Indian Geographical Society, Chennai.

Academic / Institutional contribution:

Working as an **Assistant Professor of Geography**, contributing to undergraduate teaching, student mentoring, practical training, and departmental academic activities. Served as an **Assistant NSS Officer**, supporting student development and community-oriented programs. Worked with **Balbharati as a Cartographer**, contributing to the preparation of educational maps and cartographic materials. Presented research papers at **national and international conferences** and actively contributes to research, seminars, workshops, examinations, student projects, internships, and geospatial skill development.

ACADEMIC RESPONSIBILITIES | OPTIONAL

1. Student mentoring and academic guidance for Undergraduate and Postgraduate Geography students.
2. Assistant NSS Officer – coordination and implementation of NSS activities and student engagement programmes.
3. Coordination and supervision of field visits, practical work, projects, and internships.
4. Contribution to departmental and institutional academic activities, seminars, workshops, and programmes.
5. Examination-related responsibilities, including paper setting, evaluation, supervision, and other examination duties.
6. Academic and administrative support for departmental activities and student development initiatives.