Name: Dr Yasir Altaf

Present Position	Assistant Professor Environment Sustainabilty & Climate Change
Employer	Islamic University of Sciences and Technology Kashmir
Date of Birth:	15th October, 1987
Email id/Mobile	yasiraltaf1988@gmail.com/+917006310409
Country of Citizenship/Residence	India

Education:

School, college and/or university attended	Degree/certificate or other specialized education obtained	Date obtained
National Institute of Technology, Srinagar	Ph.D in Civil Engineering (Water Resources Engineering)	2018
National Institute of Technology, Srinagar	Master of Technology in Civil Engineering (Water Resources Engineering)	2012
Shere Kashmir University of Agricultural Sciences and Technology, Kashmir	Bachelor of Technology in Agricultural Engineering	2010

Employment Record relevant to Assignment: NA

Period	Employing organization and your title/position Contact information for references	Country	Summary of activities performed relevant to the Assignment
From: June 2024 – Present	Assistant Professor Department of Environmental Sustainabilty & Climate Change,Islamic University of Sciences and Technology Kashmir	India	Research &Teaching
From: April 2022 – May 2024	Employer: RMSI Private Limited, Noida, India Positions held: Technical Specialist (Water Resources) **Reference-Name**: Mr Pushpendra Johari **Email:** Pushpendra.Johari@rmsi.com **Tel:**+919958100397	India	Development of flood forecasting systems, Development, Calibration and validation of Hydrological and hydraulic models. Water availability studies etc
From: August 2018 - March 2022	Employer: RMSI Private Limited, Noida, India Positions held: Assistant Technical Specialist (Water Resources) **Reference-Name**: Mr Pushpendra Johari **Email:** Pushpendra.Johari@rmsi.com **Tel:**+919958100397	India	Development of flood forecasting systems, Development, Calibration and validation of Hydrological and hydraulic models. Water availability studies, etc
From: March 2015 - March 2018	Employer: National Institute of Technology, Srinagar Positions held: Senior Research Fellow	India	Research scholar in a project entitled Integrated Climate and Hydrological Modelling of High-Altitude Catchment of Western Himalayan Region

From: March 2013 - March 2015	Employer: National Institute of Technology, Srinagar Positions held: Junior Research Fellow **Reference-Name**: Prof M.A.Ahanger **Email:** maahanger@gmail.com **Tel:**+919419404659	India	Research scholar in a project entitled Integrated Climate and Hydrological Modelling of High Altitude Catchment of Western Himalayan Region
From: September 2012	Employer: Shere Kashmir University of Agricultural Sciences and Technology, Kashmir Positions held: Research Fellow	India	Research fellow
- December 2012			

Publications in Journals and Conference Proceedings:

1. OWAIS AHMAD BHAT, ROHITASHW KUMAR, MUKESH KUMAR and **YASIR ALTAF,** (2015), "Development of deterministic runoff prediction model for micro watersheds of 19 Dal Catchments of Kashmir Valley, India", Journal of Soil and Water Conservation New Series. Soil Conservation Society of India. Jan– March, 14(1), 19-3. ISSN 0022–457X.
2. **YASIR ALTAF,** Manzoor Ahangar, Mohammad Fahimuddin, (2016). "Future Climatic changes in Lidder basin of west Himalayan Region" . Volume 7,no.3 .page 334-353 International journal of Hydrology science and Technology , Inderscience publishers .ISSN 2042-7816.
3. **YASIR ALTAF,** ROHITASHW KUMAR, Rubina Mir and OWAIS AHMAD BHAT, (2016), Evaluation of emerging trend of Saffron (Crocus Sativus) Vis-a- Vis Climate Change in temperate region of Kashmir Valley, India. Journal of Soil and Water Conservation New Series. Soil Conservation Society of India . Oct – December, 15(4), 345-348. ISSN 0022–457X.
4. **Altaf Y,** Ahmad AM, Mohd F (2017) MLR Based Statistical Downscaling of Temperature and Precipitation in Lidder Basin Region of India. Environ Pollut Climate Change 1: 109.
5. **YASIR ALTAF,** Manzoor Ahangar, Mohammad Fahimuddin, (2017). "Hydrological Response to Climate Change in High Altitude Catchment".Int.Journal of Water . Inderscience publishers
6. **YASIR ALTAF,** Manzoor Ahangar, Mohammad Fahimuddin, (2018). "Water Balance Study of a High Altitude Catchment in Indus Basin of Himalayas: Application of physics based distributed hydrologic model-MIKE SHE." International journal of Hydrology science and Technology, Inderscience publishers.
7. **Yasir Altaf,** Prof. Manzoor Ahangar & Dr. Mohammad Fahimuddin (2019) Modelling Snowmelt runoff in Lidder River basin using coupled model, International Journal of River Basin Management, DOI: 10.1080/15715124.2019.1634082.
8. **YASIR ALTAF,** Manzoor Ahanger, Mohammad Fahimuddin, (2016), Natural Resources Management : Ecological Perspectives. MLR based Statistical downscaling of temperature and precipitation in Lidder basin region of India. Vol.1.Proceedings of the Indian Ecological Society, International Conference, Shere Kashmir University of Agricultural Sciences and Technology (Skuast),India 18-20 February 2016.ISBN-978-93-5254-337-3.
9. **YASIR ALTAF,** Manzoor Ahangar, Mohammad Fahimuddin, (2017), Modelling Snowmelt Runoff in Lidder River Basin using coupled Model. International conference on Status and future of Large Rivers organized by University of Vienna and NIH Roorkee and held at India habitat centre -NewDelhi. (18-21 April 2017).
10. **YasirAltaf**, Shakeel Ahmad Bhat, Shafat Khan et al (2017), Performance Evaluation of different irrigation systems on the production of Saffron in Kashmir Valley. National conference on saffron production and productivity organised by SKUAST-K, (7-8 August 2017).
11. Mohmmad Idrees Attar, Sameena Naseer, Junaid Nazir Khan, Shabir Ahmad Bangroo, **Yasir Altaf**, Afzal Husain Khan, Ehab Sabi,Assessment of shift in GWPZs in Kashmir Valley of Northwestern Himalayas, Environmental and Sustainability Indicators,Volume 24,2024,ISSN 2665-9727,https://doi.org/10.1016/j.indic.2024.100513.
12. Attar, M.I., Khan, J.N., **Altaf, Y**. *et al.* Development of satellite data based rainfall IDF curves and hyetographs for flood risk management in the Kashmir Valley. *Nat Hazards* (2025). https://doi.org/10.1007/s11069-025-07205-3.

Language Skills:

Languages	Speaking	Reading	Writing
English	Good	Good	Good
Urdu	Good	Good	Good
Kashmir	Good	Good	Good

Other Trainings:

- Undergone one-month industrial training at Jain Irrigation Ltd. Maharashtra in December 2012.
- Attended Three days training program at DHI Environment India New-Delhi on Ground Water modelling– FEFLOW.
- Attended five days training program at NIH Roorkee on Groundwater modelling using Mod- Flow, Mike-11 and Mike she from 2-6 February 2015.
- One month internship at DHI (India) Environment Pvt. Ltd from 10 February 2016 to 20 February 2016.
- 15 days internship at DHI (India) Environment Pvt. Ltd from 10 October 2016 to 25 October.Attended one-week National level workshop on the theme "Connecting Nature to environment" organized by Department of chemical Engineering, National Institute of Technology, Srinagar from 24-29th September 2017.

Adequacy for the Assignment:

Detailed Tasks Assigned on Consultant's Team of Experts:	**Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks** Name of assignment or project: **Development of Flood Forecasting Model in Dhansiri River, Nagaland** Year: 2021-2022 Location: Nagaland, India; Client: Water Resources Department, Government of Nagaland, India Main project features: Develop and operationalize a flood forecasting system including development of a dashboard for visualizing and flood warning dissemination for areas near Dimapur in Nagaland. The objective also envisages establishing an RTDAS network; develop flood inundation maps for flood plain regulatory management, training and capacity building programs for effective implementation of the flood warning and evacuation system in the AoI. Positions held: Hydrological Modeller Activities performed: • Review of existing hydro-met network in the Dhansiri basin • Support designed hydro-meteorological network to augment the existing network and finalization of suitable locations for installation of instruments with client • Proposed 3 automatic rain gauges (ARG), 3 automatic water level recorders (AWLR) with GSM/GPS and INSAT based data transmission facility and 13 audio-video siren systems at suitable locations. • Procurement of hydro-met instruments from certified vendors (in India) as per the specifications provided by client. • Supervising installation of hydro-met network including civil work and other allied activities, once the installation is completed the proposed network will be maintained by the team for 48 months Development of flood forecasting and early warning dissemination system for last mile connectivity

Name of Project: **Multi Hazard Risk Assessment for the State of Jammu and Kashmir**
Year: 2018 - 2024
Location: Jammu & Kashmir
Clients: Disaster Management, Relief, Rehabilitation and Reconstruction Department Government of Jammu and Kashmir, India
Main Project Features: As part of Jhelum & Tawi Flood Recovery Project (JTFRP – the World Bank Funded) of the Government of Jammu and Kashmir (Go J&K), this project will develop a Digital Risk Database for entire J&K State and selected Urban, Rural, and Tourists hot-spots comprising of risk information for various natural and man-made hazards.
Positions Held: Hydrologist
Activities Performed:

- Development of Hydrological models using HEC-HMS software for five river basins of Jammu Kashmir (Rainfall to run off model calibration and validation incorporating snowmelt component)
- Development of Hydraulic model (1D, 2D and coupled 1D-2D model) using HEC- RAS software for five river basins of Jammu Kashmir.
- Glacial Lake Outburst Flood Hazard Assessment using Arc-GIS and 1D model development using HEC-RAS for various critical lakes.
- Flash Flood Hazard Assessment for the whole state.

- Forecasting of Flash flood and Riverine flood.
- Development of Integrated Operational Forecasting System for whole Jammu and Kashmir.
- Imparted Hydrological (HEC-HMS) and Hydraulic Models (1D-2D using HecRas) development Trainings for in service Engineers of Irrigation and flood control departments of Jammu and Srinagar.

Name of Project: **Multi-hazard Risk Assessment for Three Cities of Maharashtra (Nashik, Nagpur and Aurangabad)**
Year: 2024 - 2025
Location: Maharashtra
Clients: Govt of Maharashtra-UNDP Partnership Program on "Strengthening Disaster Risk Management Systems for the State Government
Main Project Features: The core objective of this assignment is to conduct a micro-level Hazard Risk Vulnerability and Capacity Assessment (HRVCA) for three cities in Maharashtra, namely Nagpur, Nashik and Chhatrapati Sambhajinagar (earlier known as Aurangabad) to assess and analyze the potential hazards, risks, and vulnerabilities faced by the respective cities and their population.
Positions Held: Hydrologist
Activities Performed:

- Development of Hydrological models using HEC-HMS software for Auranabad City (Rainfall to run off model calibration and validation)
- Development of Hydraulic model (1D, 2D and coupled 1D-2D model) using HEC- RAS software for Aurangabadad to generate different Return period maps.

Name of assignment or project: **Water Availability Study in the Districts of Purulia, Bankura and Jhargram in West Bengal under National Hydrology Project**
Year: 2022-2024
Location: West Bengal, India;
Client: Irrigation and Waterways Directorate, Govt. of West Bengal
Main project features: To assess the water availability/catchment yields in the three project districts, i.e. Purulia, Bankura and Jhargram for designing water resources projects, determining available water for different sector use and reservoir operation and planning.
Positions held: Water Resource Expert
Activities performed

- Analysis of hydro-meteorological and ground water data
- Develop hydraulic models using HEC-RAS for the three study districts
- Estimate monthly surface-water availability in the catchments of the rivers Kangsabati, Damodar and Subarnarekha
- Estimate monthly Ground-water availability in the catchments of the rivers Kangsabati, Damodar and Subarnarekha
- Assess future water requirement for a planning horizon of 30 years considering climate change scenarios
- Support preparing different sections of the reports

Name of assignment or project: **WRD -GoAP - Hydrological Assessment of Un-gauged Basins (Yeleru, Manneru, Paleru, Tammileru and Gostani of the east flowing rivers in the Eastern Ghats region**
Year: 2021-2024
Location: Andhra Pradesh, India;
Client: GOVERNMENT OF ANDHRA PRADESH WATER RESOURCES DEPARTMENT
Main project features: The core objective of the project is to conduct a hydrological assessment of the un-gauged basins of Yeleru, Manneru, Paleru, Tammileru, and Gostani in the Eastern Ghats region.
Positions held: Hydrological modeller
Activities performed

- Analysis of hydro-meteorological data
- Develop hydrological models using HEC-HMS for the five river basins
- Runoff estimation/ stream flow assessment in the east-flowing rivers region of un-gauged catchments.
- Impact assessment of water availability due to climate change and land-use changes.

Name of assignment or project: **WRD Maharashtra-River basin planning for water management for konkan basin**
Year: 2022-2024
Location: Maharashtra, India;
Client: WRD Maharashtra
Main project features: Surface water availability, Ground Water availability, Development of Hydrological models for 29 catchments of Konkan basin.
Positions held: Water Resource Expert
Activities performed

- Analysis of hydro-meteorological and ground water data
- Develop hydrologic and hydraulic models using HEC-HMS & HEC-RAS for the river basins of konkan basin.
- Estimate monthly surface-water availability in the catchments of the Konkan basin
- Estimate monthly Ground-water availability in the catchments of the Konkan basin
- Assess future water requirement for a planning horizon of 30 years considering climate change scenarios
- Support preparing different sections of the reports

Name of assignment or project: **Development of Nile Basin wide Drought Early Warning System**
Year: 2023-2025
Location: Addis Ababa
,Ethiopia
Client: Eastern Nile Technical Regional Office (ENTRO), Yeka sub city, Woreda-09, Ethiopia
Main project features: Develop and deploy a purpose-built and operational Nile DEWS inclusive of associated information generation, sharing, and user engagement aspects.
• Provide institutional advisory and technical support to facilitate the establishment and initial work of a network of Drought Reporters from NBI countries.
• Quantitative and qualitative validation of DEWS' data inputs and outputs.
• Drought impact assessment(s) that: focus on NBI countries or sub-basins, Target specific drought impacts of national or regional interest and that are related to the Nile DEWS priority impacts.
Scoping will be undertaken in coordination with at least ENTRO and NBI focal points and also will consider data availability and the potential role of validators and/or Drought Reporters.
Positions held: Flood Modeler
Activities performed

- Review of meteorological and hydrological observational networks for Nile basin.
- Development of hydrologic models using HEC-HMS for eleven river basins across eleven countries covering entire Nile basin.

Name of Project: WAPCOS Phase-II: Pre-feasibility hydrological analysis of proposed hydro potential sites of Indus sub basins of India.
Year: 2020 - 2021
Location: India
Clients: WAPCOS
Positions Held: Water Resource Expert
Activities Performed:

- Carry out feasibility study and preparation of pre-feasibility reports of various hydro potential sites (selection locations in India).

A. Name of Project: **Integrated Climate and Hydrological Modelling of High Altitude Catchment of Western Himalayan Region**

Year: 2013 - 2018
Location: India

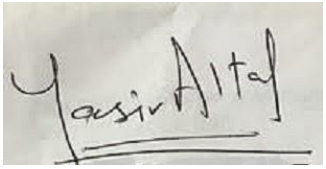
Institute: National Institute of Technology, Srinagar, India
Main Project Features: Climate Change,Downscaling, Water Balance Study ,Snowmelt Modelling, Hydrological Modelling. Impact of Climate change on Hydrological Modelling Positions Held: Research Scholar

Activities Performed:

- Development of Coupled Hydrological model using Mikeshe-Mike-11 (Rainfall to run off model calibration and validation)
- Snowmelt Contribution to runoff.
- Downscaling of GCM outputs and linking of GCM outputs with Hydrological model using Mikeshe-Mike-11.

Name of assignment or project: **Farmers participatory Action research programme**
Year: 2012
Location: Jammu and Kashmir
Positions held: Research Fellow
Activities performed:
Transfer of different Technologies like Drip irrigation, Sprinkler irrigation, Polyhouse at grassroot level.

Expert's contact information: (e-mail: yasiraltaf1988@gmail.com, phone: + 917006310409)



Dr. Yasir Altaf 7th March 2025