# DR SYED UMAIR SHAHID (HEC Approved PhD Supervisor)

Date of Birth: 10-01-1985

Languages: English, Urdu and Punjabi

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## **Experience**

Since Oct 2019 Assistant Professor

Centre for Integrated Mountain Research,

University of the Punjab, Lahore.

July 2018 Assistant Professor (IPFP)

to July 2019 College of Earth & Environmental Sciences,

University of the Punjab, Lahore.

Feb 2008-Oct 2008 Geography Teacher (O-level)

Aitchison College Lahore.

### **Academic Record**

S. No.	Degree	University	Year	CGPA/ Grade	Subject
1	PhD	NUST Islamabad	2017	4.00	Remote Sensing & Geographical Informarion Systems
2	MS	NUST Islamabad	2012	3.45	Remote Sensing & Geographical Informarion Systems
3	M.Sc.	PU Lahore	2008	3.67	Geography
4	Bachelor of Arts	GCU Lahore	2005	3.41	European History, Geography, Political Science
5	Intermediate	BISE Lahore	2003	A+	Mathematics, Statistics,
				(898/1100)	Economics
6	Matric	BISE Lahore	2001	A+	Computer Science, Mathematics,
				(687/850)	Chemistry, Physics

# **Courses Studied During PhD**

- Spatial Analysis and Modeling
- Engineering Aspects of Remote Sensing
- Remote Sensing in Hydrology
- Advanced Spatial Data Management
- Advanced Digital Image Processing
- Spatial Statistics

### **PhD Dissertation Title**

 Groundwater Vulnerability Assessment of Lahore City based on Modified DRASTIC model in GIS

### **Courses Studied During MS**

- GeoDatabases and Programming
- Remote Sensing
- Geographical Information Systems
- Spatial Decision Support System
- Research Methods
- Natural Hazard and Disaster Management
- Land Information System
- Geodesy

### **MS Dissertation Title**

 Groundwater Quality Assessment and its Correlation with Gastroenteritis using GIS: A Case Study of Rawal Town

### **Publications**

- Shahid, S. U., Iqbal, J., & Hasnain, G. (2014). Groundwater quality assessment and its correlation with gastroenteritis using GIS: a case study of Rawal Town, Rawalpindi, Pakistan. Environmental monitoring and assessment, 186, 7525-7537.
- Shahid, S. U., & Iqbal, J. (2016). Groundwater quality assessment using averaged water quality index: a case study of Lahore City, Punjab, Pakistan. In IOP conference series: Earth and Environmental Science (Vol. 44, No. 4, p. 042031). IOP Publishing.
- Shahid, S. U., Iqbal, J., & Khan, S. J. (2017). A comprehensive assessment of spatial interpolation methods for the groundwater quality evaluation of Lahore, Punjab, Pakistan. NUST Journal of Engineering Sciences, 10(1), 1-13.
- Shahid, S. U., & Khalid, W. (2019). Geospatial Analysis for the Assessment of Urban Sprawl Impact on Water Table in Lahore, Punjab, Pakistan. *International Journal of Water Resources* and Arid Environments, 8(1), 23-33.
- Zaman, M. H., Mustafa, G., Sheikh, M. A., Qadir, A., Shahid, S. U., & Abbasi, N. A. (2022). A multi-tissue biomonitoring investigation of toxic trace elements and their trophic transfer potential in a semi aquatic bird species, the Cattle Egret (Bubulcus ibis). Chemosphere, 300, 134582.
- Khan, M., Tahir, A. A., Ullah, S., Khan, R., Ahmad, K., Shahid, S. U., & Nazir, A. (2022). Trends and projections of land use land cover and land surface temperature using an integrated weighted evidence-cellular automata (WE-CA) model. *Environmental Monitoring and Assessment*, 194(2), 120.
- Asif, M., Yaseen, M., & Shahid, S. U. (2022). Water quality assessment using water quality index: a case study of high altitude area, Gilgit City, Gilgit Baltistan, Pakistan. *Pakistan Journalof Science*, 74(4), 260-270.
- Shahid, S. U., Abbasi, N. A., Tahir, A., Ahmad, S., & Ahmad, S. R. (2023). Health risk assessment and geospatial analysis of arsenic contamination in shallow aquifer along Ravi River, Lahore, Pakistan. *Environmental Science and Pollution Research*, 30(2), 4866-4880.

Shahid, S. U., Iqbal, J., Abbasi, N. A., & Tahir, A. (2023). GIS based hotspot analysis and health risk assessment of groundwater arsenic from an unconfined deep aquifer of Lahore, Pakistan. Environmental Geochemistry and Health, 1-16.

## **Conferences / Seminars / Symposia / Workshops**

- Participated in "International GeoInformatics Summer School (online)" on Social Sensing, Geospatial Big Data Computing and Disaster Management held at LIESMARS, Wuhan University, China from August 23rd to 31st, 2021.
- Attended "9th International Conference on Water Resources and Arid Environments" (virtual conference) organized by King Saud University, Kingdom of Saudi Arabia from March 29th to 31st, 2021.
- Nimra Saqib, Zarwa Farooq, Noor-ul-Ain and Syed Umair Shahid "Air Quality Analysis of Lahore City during winter 2018-2019" abstract published in the "3rd International Conference on Emerging Trends in Earth & Environmental Sciences" held at College of Earth and Environmental Sciences, University of the Punjab, Lahore from November 16th to 19th, 2021.
- Muhammad Yaseen, Iqra Ramzan, Syed Umair Shahid, Yasir Latif and Sohail Abbas "Identification of Inhomogeneities and Change Points in Climatic Data of Upper Indus River Basin, Pakistan" abstract published in the "3rd International Conference on Emerging Trends in Earth & Environmental Sciences" held at College of Earth and Environmental Sciences, University of the Punjab, Lahore from November 16th to 19th, 2021.
- Muhammad Yaseen, Fizza Afroz, Syed Umair Shahid, Yasir Latif and Sohail Abbas "Assessment of suitable sites for Rain Water Harvesting using Geospatial Techniques and SCS Curve Number Method in Jhelum River Basin, Pakistan" abstract published in the "3rd International Conference on Emerging Trends in Earth & Environmental Sciences" held at College of Earth and Environmental Sciences, University of the Punjab, Lahore from November 16th to 19th, 2021.
- Muhammad Yaseen, Aimen Mateen, Narmeen, Syed Umair Shahid, Yasir Latif and Sohail Abbas "Geospatial Analysis for the Geomorphological Characterization of Trans-Boundary Watershed of Upper Indus Basin, Pakistan" abstract published in the "3rd International Conference on Emerging Trends in Earth & Environmental Sciences" held at College of Earth and Environmental Sciences, University of the Punjab, Lahore from November 16th to 19th, 2021.
- Syed Umair Shahid, Naeem Akhtar Abbasi and Areej Tahir "GIS modelling for health risk assessment due to arsenic in the aquifer along river Ravi, Lahore" abstract published in the "International Conference on Recent Trends in Environmental Sustainability (ESCON, 2022)" organized by Department of Environmental Sciences, COMSATS University Islamabad, Vehari Campus from February 21st to 23rd, 2022.
- Syed Umair Shahid, Sadaf Javed and Javed Iqbal "Groundwater arsenic modelling using geospatial techniques for a mega city, Lahore" abstract published in the "International Conference on Recent Trends in Environmental Sustainability (ESCON, 2022)" organized by Department of Environmental Sciences, COMSATS University Islamabad, Vehari Campus from February 21st to 23rd, 2022.
- Syed Umair Shahid and Javed Iqbal "Groundwater vulnerability evaluation based on Modified DRASTIC Model and its relationship with groundwater arsenic and water table in Lahore" abstract published in the "International Conference on Recent Trends in Environmental Sustainability (ESCON, 2022)" organized by Department of Environmental Sciences, COMSATS University Islamabad, Vehari Campus from February 21st to 23rd, 2022.

# **Research Projects**

Project Title	Principal Investigator	Amount	Sponsoring Agency
Geospatial Analysis for Arsenic	Dr Syed Umair Shahid	PKR	Higher Education
Contamination in the Vicinity of River		431,000/-	Commission,
Ravi, Lahore, Pakistan			Pakistan
Comparison of Spatial Interpolation	Dr Syed Umair Shahid	PKR	University of the
Methods for Rainfall Estimations in the		200,000/-	Punjab, Lahore.
parts of Upper Indus Basin, Pakistan			

# **Courses Developed**

Class	Course No	Course Title	University / Department	
Ph.D	GMT-703	Natural Hazards and	College of Earth & Environmental	
Geomatics		Disaster Management	Sciences, University of the Punjab, Lahore	
	GMT-705	Geomatics for Environment	As Above	
	GMT-708	Spatial Statistics	As Above	
	GMT-710	Water Informatics	As Above	
M.Phil.	GMT-506	Spatial Analysis and	As Above	
Geomatics		Modeling		
	GMT-510	Geo-statistics	As Above	
M.Phil.	CIMR-GIS-	Applied Geospatial	Centre for Integrated Mountain	
Disaster	514	applications in Disaster	Research	
Management		Management		
BS Disaster	CIMR-	Fundamentals of Remote	As Above	
Management	GIS-127	Sensing and GIS		
	CIMR-GIS-	Applied RS and GIS in	As Above	
	214	Disaster Risk Management		
	CIMR-	Hazard Mapping	As Above	
	HMT-221	Techniques		

# **Courses Taught**

Class	University/ Department	Semester	Course No.	Course Title
MSc MCWM	Centre for Integrated Mountain Research	First Semester	CIMR-GIS-316	Fundamentals of RS & GIS
MSc MCWM	As Above	Second Semester	CIMR-GIS-326	Applied RS & GIS in Watershed Management
MSc MCWM	As Above	Third Semester	CIMR-ME-415	Mountain Entrepreneurship
MSc MCWM	As Above	Third Semester	CIMR-DSS-438	Decision Support System and Watershed Modeling

BS Disaster Management	As Above	Second Semester	CIMR-GIS-127	Fundamentals of RS & GIS
BS Disaster Management	L As Ahove		CIMR-GIS- 214	Applied RS & GIS in Disaster Risk Management
BS Disaster Management	As Above	Fourth Semester	CIMR-HMT-221	Hazard Mapping Techniques
BS Disaster Management	As Above	Fifth Semester	CIMR-GMD-314	Gender Mainstreaming in Disaster Management
M Phil GCSD	As Above	First Semester	CIMR-GDA-671	Geo-environmental Data Analysis
M Phil GCSD	As Above	Second Semester	CIMR-GIS-675	Applied RS & GIS in Geo- environmental Conservation

### **Professional Exposure**

- Conducted Survey about Urban Tourism in Murree Hills and Adjacent Areas in 2007.
- Attended and Participated in International Conference on Advances in Space Technologies held at NUST, Islamabad in 2008.
- Attended a weekly training on Basic Survey Techniques employed for spatial data collection organized by Army Survey Group, Abbotabad in 2009.
- Attended National Workshop on Hydro-Meteorological Modeling and Simulation using GIS and RS Technologies held at NUST, Islamabad in 2014.
- Attended a weekly training on Basics of Soil Surveying at Soil Survey of Punjab, in 2014.
- Attended International workshop on Water, Sanitation and Resource Recovery Solutions for Sustainable Development held at NUST, Islamabad in 2017.
- Attended a workshop on Google Earth Engine held at University of the Punjab, Lahore in 2018.
- Member of Technical Committee of the 38th All Pakistan Science Conference on Energy Crisis and their Solutions in Pakistan held on 10-11 December 2018 at College of Earth & Environmental Sciences (CEES), Quaid-i-Azam Campus, University of the Punjab, Lahore.

### **Achievements**

- 1st PhD graduate of IGIS, NUST, Islamabad.
- Merit Scholarship holder at NUST.
- Two times Merit Scholarship Holder during MSc.
- Won Many Prizes in PTV's Tarig Aziz Show.
- Won Scholarship from Board of Intermediate & Secondary Education Lahore.
- 4th Position among Boys in Intermediate in Board of Intermediate and Secondary Education,
  Lahore.

## **ESRI Certifications**

- Basics of the Geodatabase Data Model.
- Georeferencing Rasters in ArcGIS.
- Creating and Editing Geodatabase Features with ArcGIS Desktop.
- Learning ArcGIS Spatial Analyst.
- Exploring Spatial Patterns in Your Data Using ArcGIS 10.
- Introduction to ArcGIS 9 Geostatistical Analyst.
- Performing Spatial Interpolation Using ArcGIS 10.
- Learning ArcGIS 3D Analyst.

## **Software**

- ArcGIS
- Erdas Imagine
- Basics of Google Earth Engine
- MS Office (Excel, Word, PowerPoint)

### References

Available on demand