DR. IMRAN AHMED KHAN
Assistant Professor
Department of Geography,
University of Karachi.
Email : imranak32@uok.edu.pk,
imranak32@hotmail.com

Personal Information:

- Date of Birth: 09-01-1974

Education:

2011	Ph.D. (Geography) 2011.
1995	M.Sc. Geography, University of Karachi.
1994	B.Sc. (Hons), Geography, University of Karachi.
1991	H.Sc. Examination, Board of Intermediate Education, Karachi.
1989	S.S.C. Examination, Board of Secondary Education, Karachi, Science Group.
2004	Japanese Language Course SHOKYU I, at Japanese Consulate Karachi from October 2003 to March 2004.
2013	Diploma in Web Wise, from Nov 12, 2012 to May 12, 2013 by Computer Collegiate Karachi (Authorized Microsoft IT Academy Program Member)

Employment Record:

ASSISTANT PROFESSOR	UNIVERSITY OF KARACHI	11-08-2016 To DATE	TEACHING AND RESARCH
LECTURER	GOVT DEGREE SC & COMMERCE COLLEGE LANDHI KORANGI 6 KARACHI GOVT OF SINDH	07-05-2002 To 10-08-2016	TEACHING AND RESARCH

Computer Skills:

1. ArcGIS 10.x	9. PIE Sat 4.0
2. Google Earth Engine (Java scripting)	10. supermap-idesktop
3. ERDAS	11. MaxEnt
4. SNAP	12. ENVI
5. Q-GIS	13. Time series ARIMA/SPSS
6. Microsoft Office	14. SeaDAS
7. SPSS	15. Photoshop
8. Panoply	16. ArcGIS Pro

GPS/Gas Analyzer etc:

Magellan GPS Tracker, Sniff CO analyzer model 50, Nosie analyzer.

BookCo-Author:

Commercial Geography for XII Commerce, published by The Earth House Karachi March 2013.

Scientific Societies/Membership:

1) All Pakistan Geographical Association
2) The Geographical Society Pakistan
3) Karachi GIS Society
4) Pakistan Association for Research in Education (PARE)
5) Society for Urban Ecology (SURE)
6) International Society for Photogrammetry and Remote Sensing (ISPRS)

Award and Achievements:

1. **1ˢᵗ Class second position** in MSc Final Examination.
2. **Secured 1ˢᵗ** in SPSC exam for Lectureship recruitment in GOVT of Sindh in 2002.
3. **NASA** discuss one of research paper in their NEWS, SUMMER NEWS Aug, 2016. https://docserver.gesdisc.eosdis.nasa.gov/public/project/Giovanni/GiovanniNews/2016/giovanni_news_summer_2016.pdf

4. All Pakistan Essay Competition on "**Standards Build Trust**" by Pakistan Standards & Quality Control Authority (PSQCA) in 14 Oct, 2016 **serve as judge.**

5. **Present paper and attend International Training on Space Cooperation**: Selected for international training by Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Science (CAS), China Space Administration (CNSA) and Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (**Affiliated to the United Nations**) (RCSSTEAP) for Training on Space Cooperation for Global Health 12-26 April, 2018 at Beijing and Harbin China.

6. **Get Invitation to the United Nations International Conference** on Space-based Technologies for Disaster Risk Reduction - "Enhancing Disaster Preparedness for Effective Emergency Response", 24-26 October 2018, Beijing, China.

7. Present Paper in **United Nations/China Forum on Space Solutions**: Realizing the Sustainable Development Goals. 24 –27 April 2019, Changsha, China. Organized by **United Nations Office for Outer Space Affairs (UNOOSA)** and China National Space Administration (CNSA).

8. **Get invitation to the 27th Workshop "Space Technology for Socio-Economic Benefits: "Ensuring inclusiveness through space-based applications and space exploration"**. As you know, the workshop will take place in Washington D.C., USA, from 18 to 20 October 2019.

9. **Get invitation to the KATRD International Conference, The 128th Congress of the Korean Academy of Tuberculosis and Respiratory Diseases**, Nov 7-8, 2019 Seoul, Korea.

10. **Outstanding Best Oral Paper Award at the 130ᵗʰ congress and international conference by** The Korean Academy of Tuberculosis and Respiratory Diseases **KATRDIC Nov 12-13-2020, Seoul, Korea. Geo-Informatics Approach for Evaluating Asthma Triggers in Karachi Pakistan: A Perspective from Developing World** Imran Khan* Department of

Geography, University of Karachi, Karachi, Pakistan.
https://www.katrdic.org/2020/abstract/awards.php

RESEARCH STUDENTS SUPERVISED

MPHIL Urooj Suhail	**Assessing the dynamics of vegetation cover in Pakistan in relation to the Climate and Soil: A remote sensing and GIS perspective**	Submitted in 2021
MPHIL Faiza Tariq	**Exploring the Spatial Patterns and Temporal Trends of Phytoplankton Variability in the Arabian Sea by Ocean Remote Sensing During 2011 to 2020**	Submitted in 2022

Special Courses, Seminars and Workshops:

1. **IBA**, ABC-LAN Based PC Training held at IBA City Campus, Karachi from February 1998 To April 1998.
2. **Computer training** of selected software at Digital Computer Institutes of Technology Karachi, from July 1998 to July 1999.
3. **Training for Election/Presiding Officers:** by Election commission of Pakistan 2002.
4. **HEC-Staff Development Course** at Dow University of Health Sciences from August 22 September 19, 2005.
5. **GIS Certificate Course**, ARC VIEW 3.2 at Department of Geography University of Karachi from December 10, 2005 to January 10, 2006.
6. **Multi-Disciplinary International Conference** on Qualitative Research in Developing Countries: Opportunities and Challenges at University of Karachi from November 3-4, 2006.
7. **International Seminar / Workshop on Dendrochronology** and its Scope in South Asia at Federal Urdu University, Karachi from 14 – 18 May 2007.
8. **SPSS Training**, Understanding Statistics Using SPSS for Data Management and Analysis at **AKU-IED** Karachi from July 2 - 6, 2007.
9. **The 13ᵗʰ all Pakistan Geographical conference held at** Department of Geography University of Karachi on 21-23 Dec, 2008.

10. The 2ⁿᵈ NATIONAL SCIENCE CONFERENCE /**WORKSHOP ON ECOLOGY** held by Federal Urdu University Karachi on 3-7 May 2010.
11. **Scientific Writing:** Under virtual Education Project (VEPP) organized by LEJ University of Karachi held on 23 January 2013**.**
12. **Training for Presiding Officers:** by Election commission of Pakistan 2013**.**
13. **Planning, execution and Successful Accomplishment of Research Degrees:** Held on April, 24-26 2014 by KIBGE University of Karachi.
14. World Day to Combat Desertification and Drought: one day seminar jointly organized by Institute of Space Technology and Department of Geography held on June 2015.
15. **Training for Election/Presiding Officers:** For local Government Elections by Election commission of Pakistan 2015.
16. Exploration of **Kirthar National Park** b**y WWF Pakistan 2016.**
17. Two-Day Workshop on **MaxEnt Species Mapping** (21-22 Jan 2017) held by Department of Geography University of Karachi.
18. Boarding on **PAKISTAN NAVY SUREY VESSEL BEHR PAIMA** on 27 March 2017. A deep sea exploration and scientific instrument utilization with Pakistan NAVY.
19. Seminar on **EARTH DAY** jointly organized by Department of Geography(UOK) and Department of Remote sensing and Geographic information service (IST), on 22 April 2017.
20. Exploration of **Kund Malir Baluchistan** b**y Department of Geography 2017.**
21. **Training on Space Cooperation for Global Health** 12-26 April, 2018 at Beijing and Harbin China.
22. **GOOGLE COLAB with Python:** December 2018 at Department of Geology University of Karachi.
23. **Workshop / Training Session** on Web of Science Training under HEC, on 14-10-2019 at LEJ University of Karachi.
24. **Workshop / Training Session** on HEC Databases & IEEE Xplore Challenge: 12-12-2019 at LEJ University of Karachi.
25. **Workshop: Fundamentals of Deep Learning for computer vision.** held by NVIDIA Dec 2019 at IBA Karachi**.**
26. **Workshop / Training: Drone application of remote sensing. 23-26 December 2019** at Department of Geology University of Karachi.
27. **On Training workshop:** Applications of Remote sensing and GIS Hydrology held on June 16-18 2020 by **IST** Islamabad.
28. **Workshop: on ARTIFICIAL INTELLIGENCE** by SYM institute University of Karachi held on 4-5 March 2021.
29. **Workshop on Empowering Beginners with GIS (WEBGIS)**: Environmental Applications with Hands-on Training and Exercises on 1-19 July, 2021 by ENVIGIS.
30. **Workshop** on attribution of multi-annual to Decal changes in the climate system 22 -24 September 2021 on line event by world climate research program (WCRP).
31. **Workshop / Webinar:** Spatio-temporal Forest Fire Monitoring held on 31-11-2021 by Emirati Society of GIS and Remote Sensing (ESGRS).
32. **Workshop / Webinar:** Remote Sensing Technology and Data Processing Applications held during 26th to 28th January 2022, hosted by Association of Science and Technology

Professionals, Deqing Geospatial Information Town (DQGAST) and supported by PIESAT Information Technology Co., Ltd with The Belt and Road International Geospatial Information Training Center (BRGTC) Wuhan University China.

33. **Workshop / Webinar:** Agricultural Remote Sensing. held on 4 and 5 July 2022. By Association of Science and Technology Professionals, Deqing Geospatial Information Town, PRC (DQGAST) and The Belt and Road International Geospatial Information Training Center (BRGTC).

34. **Workshop:** Faculty Development Workshop. Institutional Excellence by Developing Centric University. Held on 28-29 Nov, 2022 by Department of Computer Science. University of Karachi.

35. **Workshop / Webinar**: Integrating IEEE eLearning Courses into your teaching: A dedicated

session for lecturers on 26 April 2023 by IEEE.

Workshop / Webinar: The Usage of Cloud Technology in Geo Analytics. held on 22 Feb, 2023 by Emirati Society of GIS and Remote Sensing (ESGRS).

36. **Workshop / Webinar**: Sharjah Electricity, Water, and Gas Authority - GIS Intelligence System held on 10 May 2023 by Emirati Society of GIS and Remote Sensing (ESGRS).

37. **Workshop / Webinar**: Statistics with Python for Data Science hosted by Analytic Vidhya for attending the Data Hour on 19 May 2023.

Funded Research Projects:
DFS/Dean Research Grant 2017: **Impact of Air pollution and socioeconomic Factors on Respiratory Diseases in Karachi: A GIS Approach.**
DFS/Dean Research Grant 2021: **Mapping urban air and noise pollution using GIS in Karachi**

Exhibition Participation:
Research Project exhibited at Pakistan International Maritime Expo & Conference (PIMEC), Maritime Expo & International Conference encompassing on Blue Economy and Maritime Potential. Held on 10-12 February 2023. Karachi, Pakistan.

International Partcipation:
Conference Papers and Posters:

1. Mohammed Raza Mehdi, Mudassar Hassan Arsalan, **Khan Imran Ahmed**, Jamil Hasan Kazmi. GEOSPATIAL MAPPING OF ASTHMA AND ITS ECOLOGY IN KARACHI, PAKISTAN. In proceeding of: ASPRS Annual Conference, at California, USA. (2012).https://www.asprs.org/a/publications/proceedings/Sacramento2012/files/Mehdi.pdf

2. **Khan Imran Ahmed,** Arsalan M.H. Using MODIS-NDVI and Climatic Variables for Drought Assessment and Monitoring in Pakistan and Adjoining South Asian Countries (2015). The 36th Asian Conference on Remote Sensing "Fostering Resilient Growth in Asia" 19 - 23 October 2015, Quezon City, Metro Manila, Philippines www.acrs2015.org, At Quezon City, Metro Manila, Philippines. https://simdos.unud.ac.id/uploads/file_penelitian_1_dir/ada619cc4f0a56fa0effc7e6f75877b4.pdf

3. **Khan Imran Ahmed**. Food Prospective in Pakistan and Adjoining Areas by Assessing Remote Sensing Data of Soil Moisture, **Training on Space Cooperation for Global Health 12-26 April, 2018, Space Day China, at Harbin, China.** http://english.igsnrr.cas.cn/ue/hs/201802/t20180205_189876.html

4. **Khan Imran Ahmed**. Remote Sensing Assessment of Agriculture and Associated Factors in China and South Asian Countries. **United Nations/China Forum on Space Solutions: Realizing the Sustainable Development Goals. 24 –27 April 2019, Changsha, China. Organized by United Nations** Office for Outer Space Affairs (UNOOSA) and China National Space Administration (CNSA). http://www.unoosa.org/documents/pdf/psa/activities/2019/UNChinaSymSDGs/Presentations/Unoosa_presentationF_Imran_Ahmed_Khan.pdf.

5. **Khan Imran Ahmed**. **Geo-Informatics Approach for Evaluating Asthma Triggers in Karachi Pakistan: A Perspective from Developing World.** At the 130th congress and international conference by The Korean Academy of Tuberculosis and Respiratory Diseases **KATRDIC Nov 12-13-2020, Seoul, Korea (Virtual Conference)** https://www.katrdic.org/2020/abstract/awards.php

6. **Khan Imran Ahmed.** An Asthma Awareness Index about symptoms, treatment, Emergency management and prevention in Karachi: A developing country perspective with low socio-economic condition. Airway Vista 2021 Korean conference March 27/28, 2021. Recent Advances in Precision Medicine of Airway Diseases, Seoul Korean/ Virtual. http://history.airwayvista.org/AirwayVista2021/Abstracts/Eposter

7. **Khan Imran Ahmed.** Community Awareness of Asthma in Karachi: A Case Study of Highly Populated Neighborhood from Developing World. At the 132th congress and international conference by The Korean Academy of Tuberculosis and Respiratory Diseases **KATRDIC Nov 11-12-2021, Seoul, Korea (HYBRID Conference).** https://www.katrdic.org/2021/abstract/accept_n.php?category=Poster&keyfield=category&keyword=asthma.

8. **Khan Imran Ahmed.** Using cloud computing Remote Sensing by Google Earth engine for vegetation Assessment in Gwadar, Pakistan, during 2014 to 2022. **The 2ndChina-Pakistan Tropical Arid Non-wood Forest science and technology exchange event** NOV 26-29, 2022 Changsha, China.

9. Tabassum Rabia, **Khan Imran Ahmed.** Drought indices Comparison for Pakistan Agricultural Area on the Google Earth Engine Platform. the International Conference on Mitigation and Adaptation for Climate Change: Focus on Agriculture and Food Security, 6-9 Feb 2023 at FCCU, Lahore, Pakistan.

10. Tabassum Rabia, **Khan Imran Ahmed.** Google Earth Engine Platform for Drought Monitoring using Vegetation datasets. United Nations/Ghana/PSIPW - 5th International conference on the use of space technology for water resources management. Accra, Ghana. https://www.unoosa.org/documents/pdf/psa/activities/2022/UN-Ghana/5c/Tabassum.pdf

Conference papers (Domestic):

1. **Khan Imran Ahmed,** Arsalan M.H and Afsar Sheeba. *Analysis of asthma risk zones in Selected Areas of Karachi: A Perspective from Landhi and Korangi Towns.* In Proceedings: Thirteen National All Pakistan Geographical Conference on Geography and Human Development, at Karachi (2008).

2. **Khan Imran Ahmed,** Arsalan M.H.*Geo-informatics for the exploration of Asthma in Karachi.*In proceeding of: 2nd National Conference on Space Science (NCSS), at Karachi (2013).

3. **Khan Imran Ahmed,** Arsalan M.H. Asthma and air pollution in Karachi: A GIS approach to define association. 2nd International Conference on Environmental Horizon at Karachi (2014).

4. **Khan Imran Ahmed** and Arsalan M.H. Assessment of concentration of carboxyhemoglobin (COHb) in human blood by absorption of traffic induced carbon monoxide (CO) and their association with asthma: A GIS perspective. First South Asian SURE Conference 18-22, January 2017 Karachi, Pakistan.

	Research Papers:
1	**Khan Imran Ahmed**, Mudassar Hassan Arsalan, Muhammad Faheem Siddiqui, Samreen Zeeshan, and Syed Shahid Shaukat (2010). Spatial Association of Asthma and Vegetation in Karachi: A GIS Perspective. *Pak. J Bot*, *42*, 3547-3554.
2	Siddiqui, M. F., M. Ahmed, N. Khan, and **Khan Imran Ahmed** (2010). A quantitative description of moist temperate conifer forests of Himalayan region of Pakistan and Azad Kashmir. *International Journal of Biology and Biotechnology (Pakistan)*. 7 (3)175-185.
3	Shareef, A., M. Azam, and **Khan Imran Ahmed** (2011). Investigation of carbon monoxide at heavy traffic intersections of Karachi (Pakistan) using GIS to evaluate potential risk areas for respiratory and heart disease. *Pakistan Journal of Scientific and Industrial Research*, 54(2) 84-89.
4	**Khan Imran Ahmed**, Mudassar Hassan Arsalan, Muhammad Faheem Siddiqui, Durdana Rais Hashmi, Samreen Zeeshan, and Burhan Ahmed Siddiqui (2011). Association of Asthma With Carbon Monoxide Concentrations on The Roads of Karachi and Potential Blood Level of Carboxy Haemoglobin. *FUUAST Journal of Biology*, *1*(1) 111-118.
5	Siddiqui, Muhammad Faheem, Syed Shahid Shaukat, Moinuddin Ahmed, Nasrullah Khan, and **Khan Imran Ahmed** (2013). Vegetation-Environment Relationship of Conifer Dominating Forests of Moist Temperate Belt of Himalayan and Hindukush Regions of Pakistan. *Pak. J. Bot*, *45*(2), 577-592.
6	Siddiqui, Muhammad Faheem, Syed Shahid Shaukat, Moinuddin Ahmed, Nasrullah Khan, and **Khan Imran Ahmed.** (2013). Age and Growth Rates of Dominant Conifers From Moist Temperate Areas of Himalayan and Hindukush Region of Pakistan. Pak. J. Bot 45, No. 4 (2013): 1135-1147.

7	Perveen, Sajida, Mudassar Hassan Arsalan, Muhammad Faheem Siddiqui, **Khan Imran Ahmed**, Shahzad Anjum, and Muhammad Abid. (2013). GIS-Based Multi-Criteria Model for Cotton Crop Land Suitability: A Perspective From Sindh Province of Pakistan." Fuuast J. Biol. 3 (1), 31-37.
8	Siddiqui, M.F., Ahmed, M., Shaukat, S. S., **Khan Imran Ahmed.** (2013). Present Status and Size Class Structure of Some Conifer Dominating Forests From Moist Temperate Area of Western Himalayan and Hindukush Region of Pakistan. FUUAST J. Biol. 3 (2), 141-155.
9	Siddiqui, Muhammad Faheem, Syed Shahid Shaukat, Moinuddin Ahmed, **Khan Imran Ahmed**, and Nasrullah Khan. (2014). Foliar and Soil Nutrient Distribution in Conifer Forests of Moist Temperate Areas of Himalayan and Hindukush Region of Pakistan: A Multivariate Approach. Pak. J. Bot 46 (5) 1811-1827.
10	**Khan Imran Ahmed**, Lubna Ghazal, Mudassar Hassan Arsalan, Muhammad Faheem Siddiqui and Jamil Kazmi (2015). Assessing The Spatial Variability of Phytoplankton Concentration Through Chlorophyll-A Satellite Data: A Case Study of Northern Arabian Sea. Pak. J. Bot., 47(2): 797-805, 2015.
11	Malik, Rohma., Bokhari, T. Z., Siddiqui, M. F., Younis, U., Hussain, M. I., & **Khan Imran Ahmed** (2015). Antimicrobial activity of Nerium oleander L. and Nicotiana tabacum L.: A comparative study. *Pak. J. Bot*, *47*(4), 1587-1592.
12	AJAIB, M., WAHLA, S. Q., SIDDIQUI, M. F., & **Khan Imran Ahmed**. (2016) Antibacterial and Antioxidant Activities of Andrachne Cordifolia (Wall. Ex Decne.) Muell. FUUAST J. BIOL.,6(1):127-134.
13	**Khan Imran Ahmed**, Mudassar H Arsalan, Muhammad Faheem Siddiqui,Nazia Kiran, Muhammad Ajaib (2016).*Short-Term Drought Assessment in Pakistan and Adjoining Areas By Remote Sensing MODIS-NDVI Data: A Potential Consequence of Climate Change*.Pak. J. Bot., 48(5): 1887-1892.
14	Zia Ibrahim, Kazmi S. J. Hasan, Zafar Hina and Khan **Imran Ahmed** (2017). Desalination Plant site suitability along Karachi Coast and Protection of Mangroves by Spatial Decisions Support System (SDSS). International journal of biology and biotechnology 14 (1) 41-47.
15	**Khan Imran Ahmed**, Hussain, M., & Arsalan, M. H. (2017). Assessing The Relationship Among Household Environment, Drinking Water and Prevailing Asthma in Karachi, FUUAST J.BIOL., 7(2): 163-169.
16	**Khan Imran Ahmed** and Arsalan Mudassar Hassan. Spatial Pattern of Traffic Induced Carbon Monoxide and Potential Health Risk in Karachi. *Preprints* **2017**, 2017110175 (doi: 10.20944/preprints201711.0175.v1). https://www.preprints.org/manuscript/201711.0175/v1
17	**Khan Imran Ahmed**, Arsalan Mudassar Hassan, Ghazal Lubna, Siddiqui Muhammad Faheem, Mehdi Mohammed Raza, Zia Ibrahim and Us Salam Iram.(2018) Satellite Based Assessment of Soil Moisture and Associated Factors for Vegetation Cover: A Case Study of Pakistan and Adjoining regions. Pak. J. Bot., 50(2): 699-709.
18	**Khan Imran Ahmed**, Arsalan Mudassar Hassan and Lubna Ghazal.(2019). *Remote Sensing of Phytoplankton Fluorescence in Northern Arabian Sea.* Pak. J. Bot., 51(2),761-765. DOI: 10.30848/PJB2019-2(45).
19	Mazhar Khalid, Arsalan Mudassar Hassan, Kazmi Syed Jamil Hassan and **Khan Imran Ahmed**. (2019). Identification of potential risk areas of malaria parasites in Pakistan using climate data and GIS. International journal of biology and biotechnology 16 (1) 151-156.

20	**Khan Imran Ahmed**, Arsalan Mudassar Hassan, Mehdi Mohammed Raza, Jamil Hassan Kazmi, Jeong Chang Seongand Daikwon Han. (2020). *Assessment of Asthma-prone Environment in Karachi, Pakistan Using GIS Modeling.* JPMA 70: 636-649. https://www.jpma.org.pk/article-details/9740
21	Sohail, U., **Khan, Imran Ahmed**., & Arsalan, M. H. Analysis The Potential of Vegetation Indices (NDVI) For Land Use/Cover Classification In Karachi By Landsat 8 Data. International Journal Of Biology And Biotechnology*, **17 (2): 359-366, 2020.**
22	**Khan, Imran Ahmed**, Sohail Urooj, Faheem Hafiza Tasmina and Tariq Humera. Satellite Derived Seasonal Patterns Of Sea Surface Temperature Near Pakistani Coast. Pakistan Geographical Review, Vol.76, No1, June. 2021, PP 52-63.
23	Arsalan, M. H., **Khan, Imran Ahmed**., Mehdi, M. R., Qureshi, S., Kazmi, S. J. H., & Qadri, M. (2021). Exploring The Awareness Of Asthma In The Context Of Socio-Economic Disparities: A Case Study Of Karachi–Pakistan. *International Journal of Biology and Biotechnology*, 537-546.
24	Khan, I. A., Arsalan, M. H., Tabassum, A., Saifullah, S. M., Ahmad, I., Siddiqui, M. F., ... & Mahmood, T. Satellite Derived Diatom Dynamics In The Indian Ocean: Mean Seasonal Patterns And Trends. *Pak. J. Bot*, 54(3): 1163-1167.

Recent learning and working with Cloud computing and App Development by Google Earth Engine:

https://imranak32.users.earthengine.app/view/khindviimran
https://imranak32.users.earthengine.app/view/appkarmosaiceditor
https://imranak32.users.earthengine.app/view/mod-ndvi-pakanimation-imran
https://imranak32.users.earthengine.app/view/chlaarabianseapersiangulfimran
https://imranak32.users.earthengine.app/view/visualizationsbandskarachisentinel2