

M. SAJJAD
Research Assistant Professor
Department of Geography
Email: msajjad@hkbu.edu.hk
Phone/WhatsApp: +85256015377



Biography

Dr. Sajjad earned his Ph.D. from the Guy Carpenter Asia-Pacific Climate Impact Centre at the City University of Hong Kong. He was a visiting scholar at Princeton University USA for one year (2018-19). He earned his Master's from Xiamen University, China under a fully-funded CSC Scholarship. He works on the frontiers of interdisciplinary climate research to explore the risk-resilience-sustainability nexus using geospatial data science approaches (e.g., spatial statistical modeling, machine learning, geo-visualization/analytics). Dr. Sajjad is a dedicated person in the field of geospatial technologies (RS, GIS, Online mapping, etc.), and their application to Environmental, Public Health, Urban Planning/Design, and interdisciplinary Climate Science. He also works on Nature-based solutions for resilience building using GI-Science. One of his core areas of work includes developing integrated spatial frameworks to provide sustainable and resilient solutions. Looking forward, Dr. SAJJAD is determined to provide solutions to risk and resilience-related challenges faced by urban areas under Global Environmental Changes using coupled location intelligence (geospatial modeling), AI, and Machine Learning-based approaches for long-term sustainability.

Consultancy Services

Science-based Research and Reporting from Geographical Perspectives

Current and Future Climate Risk Assessment (Floods, Typhoons, Droughts, Sea Level Rise)

Physical Climate Risk Reporting

Task Force on Climate-related Financial Disclosures (TCFD) and ESG

Environmental Impact Assessment

Spatial Business Analysis (Network, Service Area, Site Suitability, Incident Mapping, Land Management, etc.)

Qualifications

PhD, City University of Hong Kong

1 Sep 2017 → 5 Oct 2021

Award Date: 5 Oct 2020

Master, Xiamen University

1 Sep 2015 → 31 Jul 2017

Award Date: 31 Jul 2017

Employment

Research Assistant Professor

Department of Geography

Hong Kong Baptist University

19 Jul 2021 → present

Research outputs

Vertical Ground Displacements and Its Impact on Erosion along the Karachi Coastline, Pakistan

Kanwal, S., Ding, X., Wu, S. & Sajjad, M., 1 May 2022, In: Remote Sensing. 14, 9, 21 p., 2054.

Assessing Response Readiness to Health Emergencies: A Spatial Evaluation of Health and Socio-Economic Justice in Pakistan

Sajjad, M., Raza, S. H. & Shah, A. A., 25 Apr 2022, (E-pub ahead of print) In: Social Indicators Research. 31 p.

Spatial inequalities in education status and its determinants in Pakistan: A district-level modelling in the context of sustainable development Goal-4

Sajjad, M., Munir, H., Kanwal, S. & Naqvi, S. A. A., Mar 2022, In: Applied Geography. 140, 102665.

Leveraging cloud-based computing and spatial modeling approaches for land surface temperature disparities in response to land cover change: Evidence from Pakistan

Waleed, M. & Sajjad, M., Jan 2022, In: Remote Sensing Applications: Society and Environment. 25, 100665.

Integrating Spatial Modelling and Space–Time Pattern Mining Analytics for Vector Disease-Related Health Perspectives: A Case of Dengue Fever in Pakistan

Naqvi, S. A. A., Sajjad, M., Waseem, L. A., Khalid, S., Shaikh, S. & Kazmi, S. J. H., 16 Nov 2021, In: International Journal of Environmental Research and Public Health. 18, 22, 30 p., 12018.

Rethinking disaster resilience in high-density cities: Towards an urban resilience knowledge system

Sajjad, M., Chan, J. C. L. & Chopra, S. S., Jun 2021, In: Sustainable Cities and Society. 69, 19 p., 102850.

Spatial–temporal characterization of rainfall in Pakistan during the past half-century (1961–2020)

Ali, G., Sajjad, M., Kanwal, S., Xiao, T., Khalid, S., Shoaib, F. & Gul, H. N., 25 Mar 2021, In: Scientific Reports. 11, 15 p., 6935.

Remote Sensing of Narrowing Barrier Islands along the Coast of Pakistan over Past 30 Years

Kanwal, S., Ding, X., Sajjad, M., Nazeer, M. & Zia, I., 8 Mar 2021, In: Journal of Marine Science and Engineering. 9, 3, 23 p., 295.

Disaster resilience in Pakistan: A comprehensive multi-dimensional spatial profiling

Sajjad, M., Jan 2021, In: Applied Geography. 126, 102367.

COVID-19: A Psychosocial Perspective

Raza, S. H., Haq, W. & Sajjad, M., 1 Dec 2020, In: Frontiers in Psychology. 11, 12 p., 554624.

Tropical Cyclone Impacts on Cities: A Case of Hong Kong

Sajjad, M. & Johnny, J. C. L., 25 Sep 2020, In: Frontiers in Built Environment. 6, 11 p., 575534.

Geo-spatially integrated soil quality evaluation: A case of Toba Tek Singh, Pakistan

Naqvi, S. A. A., Islam, A., Waseem, L. A., Hussain, D., Naqvi, R. Z., Kazmi, S. J. H., Sajjad, M. & Shaikh, S., 15 Sep 2020, In: Pakistan Journal of Botany. 54, 1, p. 263-273 11 p.

Towards sustainable wastewater management: A spatial multi-criteria framework to site the Land-FILTER system in a complex urban environment

Kanwal, S., SAJJAD, M., Gabriel, H. F. & Hussain, E., 1 Sep 2020, In: Journal of Cleaner Production. 266, 13 p., 121987.

Spatial heterogeneities of current and future hurricane flood risk along the U.S. Atlantic and Gulf coasts

Sajjad, M., Lin, N. & Chan, J. C. L., 15 Apr 2020, In: Science of the Total Environment. 713, 136704.

Incorporating natural habitats into coastal risk assessment frameworks

Sajjad, M., Chan, J. C. L. & Lin, N., Apr 2020, In: Environmental Science & Policy. 106, p. 99-110 12 p.

Integrating spatial statistics tools for coastal risk management: A case-study of typhoon risk in mainland China

Sajjad, M., Chan, J. C. L. & Kanwal, S., 1 Feb 2020, In: Ocean & Coastal Management. 184, 105018.

Three Decades of Coastal Changes in Sindh, Pakistan (1989–2018): A Geospatial Assessment

Kanwal, S., Ding, X., Sajjad, M. & Abbas, S., 1 Jan 2020, In: Remote Sensing. 12, 1, 24 p., 8.

Urban environment dynamics and low carbon society: Multi-criteria decision analysis modeling for policy makers

Ali, G., Abbas, S., Pan, Y., Chen, Z., SAJJAD, M., Hussain, J. & Ashraf, A., Nov 2019, In: Sustainable Cities and Society. 51, 101763.

Integrating Typhoon Destructive Potential and Social-Ecological Systems Toward Resilient Coastal Communities

Sajjad, M., Li, Y., Li, Y., Chan, J. C. L. & Khalid, S., 9 Jul 2019, In: Earth's Future. 7, 7, p. 805-818 14 p.

Risk assessment for the sustainability of coastal communities: A preliminary study

Sajjad, M. & Johnny, J. C. L., 25 Jun 2019, In: Science of the Total Environment. 671, p. 339-350 12 p.

Network Constrained Spatio-Temporal Hotspot Mapping of Crimes in Faisalabad

Khalid, S., Shoaib, F., Qian, T., Rui, Y., Bari, A. I., Sajjad, M., Shakeel, M. & Wang, J., Sep 2018, In: Applied Spatial Analysis and Policy. 11, 3, p. 599-622 24 p.

Assessing Hazard Vulnerability, Habitat Conservation, and Restoration for the Enhancement of Mainland China's Coastal Resilience

Sajjad, M., Li, Y., Tang, Z., Cao, L. & Liu, X., Mar 2018, In: Earth's Future. 6, 3, p. 326-338 13 p.