

2017 – 2027 Member of Council of Architecture, India – Architect's License no.: CA/2017/88104

Languages

Mother Tongue(s) Bengali, Hindi, Urdu (native speaker)
Other Languages English (academic and professional working language), Arabic, Punjabi, Nagamese, Portuguese (learning/beginner stage)

Software Skills

Spatial Analysis QGIS, ArcGIS, ERDAS, Global Mapper, DepthMapX (Space Syntax), Fractalyse, ImageJ
Data Analysis R-Studio, SmartPLS, SPSS, Power BI
Planning & Design AutoCAD Map 3D, Mappuzzle, Revit, Lumion 3D, Google SketchUp, Adobe Suite
Qualitative Questionnaires/Interviews, Grounded Theory, Evidence-based Planning, MS Office
Research Tools

Academic Services

- International Conference on Computational Science and Its Applications (ICCSA) Committee Member as a Technical Assistant.
- PhD evaluation committee member at University of Cagliari, Italy.
- Reviewer for reputed Q1 WoS journals in Elsevier & Springer Nature including Sustainable Cities & Society, Scientific Reports, Land Use Policy, and Landscape and Urban Planning, among others.

Selected Awards

- 2022 Commendable Performance was attained in the PMRF annual research review in December 2022. Classified as one of the top 8% of researchers by MHRD, Govt. of India.
- 2019 – 2020 Top 25 thesis of the DAIDA Thesis Awards 2019-2020 by Institute of Housing and Urban Development Studies of the European Union.
- 2019 Gold Medallist, 2019, for securing the first position in M.Arch (Urban Regeneration) at Jamia Millia Islamia, India.
- 2017 Silver Medallist, 2017, for securing the second position in B.Arch (Architecture) at Aligarh Muslim University, India.

List of Publications

Journal Articles (*Published*)

1. **Alam, T.**, Dastoum, M., Askarizad, R., & Garau, C. (2026). Morphological and Fractal Diagnostics for Sustainable Transport Planning in Sensitive Tourism Landscapes. *Sustainable Cities and Society*. 143, 107365. <https://doi.org/10.1016/j.scs.2026.107365>.
2. **Alam, T.** (2026). Integrating Space Syntax and Bathtub Flood Modelling to Assess Accessibility Impacts of Sea-Level Rise in Copenhagen's Historic Core. *Journal of Environmental Management*. 397 (128314). <https://doi.org/10.1016/j.jenvman.2025.128314>
3. Garau, C. & **Alam, T.** (2026). Scaling Urban Complexities using Space Syntax and Fractal Analysis: The Sardinian Cities in Italy as a case study. *Journal of Urban Design*, 1–20. <https://doi.org/10.1080/13574809.2026.2629313>
4. **Alam, T.**, & Banerjee, A. (2026). Predicting significant urban attributes based on elevated water stress using K-Means clustering. *Urban Water Journal*, 1–17. <https://doi.org/10.1080/1573062X.2026.2639350>.
5. **Alam, T.** (2026). Revitalizing Blue Infrastructure in Indian Cities: A Comparative Study for Climate Resilience. *Journal of Sustainable Water in the Built Environment: ASCE*. <https://doi.org/10.1061/JSWBAY/SWENG-704>
6. Dastoum, M., **Alam, T.**, Askarizad, R., & Garau, C. (2026). Assessing Socio-Spatial Equity in Access to Coastal Areas of Italian Island Cities. *TeMA Journal of Land Use, Mobility and Environment*. 21–36. <https://doi.org/10.6093/1970-9870/13323>.
7. **Alam, T.**, & Banerjee, A. (2024). Investigating urban morphological drivers of household water use in developing economies: A structural equation model approach. *Environment and Planning B: Urban Analytics and City Science*, 52(5). <https://doi.org/10.1177/23998083241284824>.
8. **Alam, T.**, & Banerjee, A. (2024). Impact of Urban Morphology on Transportation Preferences in Fostering the Sustainable Development of Emerging Urban Centers in South Bengal. *Journal of the Eastern Asia Society for Transportation Studies*, 15, 690–707. <https://doi.org/10.11175/easts.15.690>.

9. **Alam, T.**, & Banerjee, A. (2023). Analyzing the Urban Form in Suburban Areas of the South Bengal Region Using Built Fractals. *Journal of Urban Planning and Development: ASCE*. 149 (4). <https://doi.org/10.1061/JUPDDM.UPENG-4543>
10. **Alam, T.**, & Banerjee, A. (2023). Characterizing land transformation and densification using urban sprawl metrics in the South Bengal region of India. *Sustainable Cities and Society*, 104295. <https://doi.org/10.1016/j.scs.2022.104295>.
11. **Alam, T.**, & Banerjee, A. (2021). Rapid Transit-Oriented Morphological Transformations in Indian Cities: A Case of Kolkata Metro. *Sustainable Urban Mobility: Opportunities and Challenges in Developing Countries: Institute of Town Planners India*. <https://doi.org/10.5281/zenodo.8321753>.

Under Review (awaiting publication)

12. Babapoor, A., Ricci, L., & **Alam, T.** (2026). Path-Dependent Urban Expansion in Arid Cities: A Multi-Decadal Remote Sensing Analysis and ANN-CA-Markov Modelling of Saudi Arabian Cities (1984–2034). *City and Environment Interactions*. <https://doi.org/10.21203/rs.3.rs-8447461/v1> [Preprint].
13. **Alam, T.**, Saraiva, M., & Garau, C. (2026). Aligning Transit Provision with Urban Morphology: A Diagnostic Assessment of Porto and Cagliari. *Cities*. [Revision Submitted]. **Corresponding & First Author.**
14. Garau, C. & **Alam, T.** (2026). Comparative Fractal and Configurational Analysis of Island Transport Networks in Sardinia and Sicily. *Environmental Development*. [Under Review]. **Corresponding Author.**
15. **Alam, T.** & Singh, P. (2026). Climate-Resilient to Commercialised: Visualising Cultural Shifts in Housing Typology of Kullu, India. *Facilities*. [Under Review]. **Corresponding Author.**
16. **Alam, T.**, (2026). From Degradation to Resilience: Nature-Based Solutions for East Kolkata's Urban Canals. *Environmental Science and Policy*. [Under Review].

Book Chapters

17. **Alam, T.**, Garau, C. (2026). Evaluating Geometric and Structured Fractal Analysis Methods to Determine the Optimal Approach for Urban Road Network Assessment. In: Gervasi, O., et al. *Computational Science and Its Applications – ICCSA 2025 Workshops. ICCSA 2025. Lecture Notes in Computer Science*, vol 15895. Springer, Cham. https://doi.org/10.1007/978-3-031-97651-3_6. **Corresponding Author.**
18. **Alam, T.** (2025). Comparing Anthropogenic Water Risks from Climate Change in London and Kolkata. In: Marques, B., Ruivo, C., Leite Viana, D., Vieira Vaz, J. (eds) *Formal Methods in Architecture. FMA 2024. Digital Innovations in Architecture, Engineering and Construction*. Springer, Cham. https://doi.org/10.1007/978-3-032-02782-5_27
19. **Alam, T.**, Shukla, S., Banerjee, A. (2025). Analyzing Diverse Urban Forms Across Kolkata's Urban Agglomeration. In: Achari, A., Bhatia, H., Nagrath, A., Rane, N.L., Pande, C.B. (eds) *Environmentally Sustainable and Socially Resilient Urban Development and Management*, 767–786. Springer, Cham. https://doi.org/10.1007/978-3-031-92850-5_32. **Corresponding & First Author.**
20. **Alam, T.** (2021). Futuristic Urbanism of eco-sensitive zone of India: A case study of Kolkata region. *Sustainable Climate Action and Water Management*, 303–309. https://doi.org/10.1007/978-981-15-8237-0_25.
21. **Alam, T.** (2020). Impact of Tourism on Local Communities: A Case of Nalanda, Bihar. In: Irshad, Q. *Urban Development - Philosophies, Principles, and Practice.*, Vol. 1(1) ISBN: 978-81-948211-4-4, pp. 193 - 218. Jamia Publication House. <https://doi.org/10.5281/zenodo.8379568>

Proceedings

22. **Alam, T.**, Saraiva, M., & Garau, C. (2026). Urban Form, Accessibility, and Cultural Change: Insights from Comparative Spatial Analysis. *3rd Conference on Future Challenges in Sustainable Urban Planning & Territorial Management*. Cartagena, Spain.
23. **Alam, T.**, Askarizad, R., Dastoum, M., Plaisant, A., & Garau, C. (2025). Fractal Models for Public Transport Optimisation: Facilitating Sustainable Tourism Access to “Cala Mariolu” in Sardinia (Italy). *Proceedings of the 13th International Conference on Innovation in Urban and Regional Planning (INPUT)*. **First Author.** [In Press]
24. **Alam, T.**, & Garau, C. (2025). Evaluating Geometric and Structured Fractal Analysis Methods to Determine the Optimal Approach for Urban Road Network Assessment. In: Gervasi, O., et al. *Computational Science and Its Applications – ICCSA 2025 Workshops. ICCSA 2025. Lecture Notes in Computer Science*, vol 15895. Springer, Cham. https://doi.org/10.1007/978-3-031-97651-3_6. **Corresponding & First Author.**
25. **Alam, T.** (2025). Comparing Anthropogenic Water Risks from Climate Change in London and Kolkata. In: Marques, B., Ruivo, C., Leite Viana, D., Vieira Vaz, J. (eds) *Proceedings of the 7th International Symposium on Formal Methods in Architecture (7FMA)*, Porto, 2024. Springer, Cham. https://doi.org/10.1007/978-3-032-02782-5_27
26. **Alam, T.**, & Banerjee, A. (2023). Evaluation of Urban Typologies and Land Affordability Surrounding Core City in Kolkata Urban Agglomeration. *Book of Abstracts. Conference of the International Seminar on Urban Form (ISUF)*. Belgrade, Serbia. <https://doi.org/10.5281/zenodo.14245425>. **Corresponding & First Author.**
27. **Alam, T.**, & Banerjee, A. (2023). Impact of Urban Morphology on Transportation Preferences in Fostering the Sustainable Development of Emerging Urban Centers in South Bengal. In *Proceedings of the 15th International Conference of Eastern Asia Society for Transportation (EASTS'2023)*. Shah Alam, Malaysia; EASTS. <https://doi.org/10.11175/easts.15.690>. **Corresponding & First Author.**

28. **Alam, T.**, & Banerjee, A. (2022). Deciphering urbanization and spatial disparity in South 24 Parganas district of West Bengal, India. Proceedings of the *58th ISOCARP World Planning Congress*. Brussels, Belgium. <https://doi.org/10.47472/zkjaabc>. **Presenter, Corresponding & First Author.**
29. **Alam, T.**, & Banerjee, A. (2021). Changing Urban Morphologies in TOD of Indian Cities. Oral Presentation at the *International Conference on Sustainable Urban Mobility- SUMo2020 (ITPI Bengal Chapter)*, Kolkata, India. ISSN: 0537-9679 **[Awarded Best Presentation]. Presenter, Corresponding & First Author.**
30. **Alam, T.** (2019). Impact of Anthropogenic Activities on Natural Resources: A Case of Water in Kullu Region, Himachal Pradesh. *Conference proceedings of Architecture for Masses: Ekistics*. Vol. 1 (1), ISBN 978-8193774946, Jamia Publication House.

Conferences

31. **Alam, T.**, Saraiva, M., & Garau, C. (2026, Jan 20 – 22). Urban Form, Accessibility, and Cultural Change: Insights from Comparative Spatial Analysis. *3rd Conference on Future Challenges in Sustainable Urban Planning & Territorial Management*. Cartagena, Spain. **Presenter.**
32. Saraiva, M., **Alam, T.**, & Garau, C. (2025, Nov 19 – 21) Socio-spatial vulnerability in the city of Porto and its relationship with the morpho-functional structure. The 15th Portuguese Geography Congress. Évora, Portugal.
33. Dastoum, M., **Alam, T.**, Askarizad, R., Congiu, T., Campisi, T., & Garau, C. (2025, September 11 – 12). Equitable access to coastal areas of Italian island cities: A comparative study of socio-spatial equity. *In Living and Walking in Cities (LWC 2025): Smart mobility and shared urban spaces (27th International Conference)*. Brescia, Italy.
34. Garau, C. & **Alam, T.** (2025, June 18 – 20). Mapping the City: Assessing the Suitability of Space Syntax and Fractal Models for Analysing Urban Forms. *XXVII National Conference of the Italian Society of Urban Planners*. Milan, Italy.
35. **Alam, T.** & Garau, C. (2025, April 10 – 12). Enhancing Accessibility: Exploring Urban and Regional Connectivity Possibilities in Sardinia, Italy. International conference 2nd edition Accessibility and Inland Mobility Advancement Strategies (AIMAS). Petralia Soprana, Sicily, Italy. **Presenter.**
36. Askarizad, A., Dastoum, M., **Alam, T.**, & Garau, C. (2025, April 4). Reimagining Healthier Cities: Post-Pandemic Urban Design and the Paradox of Social Connectivity vs. Distancing. *Basic, Translational, and Clinical Research, Driven by Covid-19 Pandemics*. Cagliari, Sardinia, Italy. **[Awarded Best Presentation]**
37. **Alam, T.** (2024, December 3–6). *Comparing anthropogenic water risks from climate change in London and Kolkata* [Conference presentation]. 7th Symposium Formal Methods in Architecture, Ordem dos Arquitectos – Secção Regional Norte (OA-SRN), Porto, Portugal.
38. **Alam, T.** (2024, June 23 – 28). Comparing Anthropogenic Water Risks from Climate Change in London and Kolkata. *Water Science Conference*. St. Paul, Minnesota, USA.
39. **Alam, T.** (2024, January 24 – 26). Regional Spatial Justice: Role of Urban Typologies Surrounding Core City in Kolkata Urban Agglomeration. *Twentieth International Conference on Environmental, Cultural, Economic & Social Sustainability*. Aveiro, Portugal. https://cgscholar.com/cg_event/events/S24en/proposal/69472
40. **Alam, T.** (2023, July 5 – 15). Urban Morphology: An Integrated Approach towards Dynamic Urban Futures. Oral Presentation at the *AESOP PhD Workshop and 35th Annual Congress*, Poznan and Lodz, Poland.
41. **Alam, T.**, & Banerjee, A. (2023, February 10 – 11). Morphing demographic characteristics driven by altering water use in South Bengal. Book of Abstracts. *Annual Research on Cities Summit (ARCS) 7.0*. Vol 1(1). pp. 26. School of Human Settlements, XIM University. <https://doi.org/10.5281/zenodo.7648092>.
42. **Alam, T.**, & Banerjee, A. (2022, December 12 – 16). Changing Water Scenario and Urban Fractals in Peri-Urban Areas of South Bengal Region. *American Geospatial Union Fall Meeting*. In SY14B - Community and Citizen Science II Online Poster Discussion. Chicago. Retrieved from <https://agu2022fallmeeting-agu.ipostersessions.com/Default.aspx?s=C1-51-0D-74-46-34-51-92-F1-0F-9D-9A-36-CC-45-23>.
43. **Alam, T.**, & Banerjee, A. (2021, October 1 – 3). Changing Urban Morphologies in TOD of Indian Cities. Oral Presentation at the *International Conference on Sustainable Urban Mobility- SUMo2020 (ITPI Bengal Chapter)*, Kolkata, India. **[Awarded Best Presentation].**
44. **Alam, T.**, (2019, September 27 – 28). A Futuristic Urbanism of eco-sensitive zone of India. Oral Presentation at the *International Conference on Water Resource, Climate Change and Sustainability*, Hyderabad, India.
45. **Alam, T.** (2019). Impact of Anthropogenic Activities on Natural Resources: A Case of Water in Kullu Region, Himachal Pradesh. *Conference proceedings of Architecture for Masses: Ekistics*. Vol. 1 (1), ISBN 978-8193774946, Jamia Publication House.
46. **Alam, T.** (2019, February 17 – 19). Sustainable Approach to City Development: A Case of Kullu Valley, Himachal Pradesh, India. Oral Presentation at the *4th National Conference on Sustainable Architecture and City*, Tehran, Iran. <https://doi.org/10.5281/zenodo.8325633>

Books

47. Garau, C., & **Alam, T.** (2026). *From Urban Form to Urban Performance: Dynamic Modelling Approaches for Spatial Planning*. Routledge, Taylor and Francis, England. **[Under Progress]**

References available on request.