

# SUCHI PRIYADARSHANI

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## Research Interests

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Sustainable Architecture and Design, Moisture propagation in buildings, Thermal Comfort, Sustainable Building Materials, Architectural Anthropology, Wellness

## Academic Background

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**Ph.D.**, (Ongoing), Indian Institute of Science, Bangalore, 9.1/10 CGPA

**B.Arch.**, (2019), Jadavpur University, Kolkata, 9.1/10 CGPA (86.14%) (Double Gold Medalist)

## Research publications

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### **Peer-Reviewed, Indexed Journal Articles:**

1. Priyadarshani, S., Mani, M., Maskell, "A novel approach examining comfort accounting for indoor humidity: A rural Indian case-study" (Preliminary Acceptance Received, In-production)
2. Rao, Roshan R., Priyadarshani, S., and Mani, M., "Examining the use of End-of-Life (EoL) PV panels in housing and sustainability," *Sol. Energy*, vol. 257, no. June 2023, pp. 210–220, 2023, [doi: 10.1016/j.solener.2023.04.033](https://doi.org/10.1016/j.solener.2023.04.033)
3. Priyadarshani, S., Mani, M., Maskell, D., "Influence of building typology on Indoor humidity regulation", *REHVA J.*, vol. 6, no. December, pp. 48–52, 2021, Available: <https://www.rehva.eu/rehva-journal/chapter/influence-of-building-typology-on-indoor-humidity-regulation>, ISSN 1307-3729.
4. Mishra, S.K., Priyadarshani, S., "Learning from Vernacular Architecture of Toda Community", *IJCRT*, vol. 8, no. 5, pp. 2893–2896, 2020. <http://doi.org/10.1729/Journal.23670>
5. Priyadarshani, S., Ghosh, M., Dutta, S., "Appropriating architectural design methodology: Based on the context of an abandoned mine", *IJAR*, vol. 8, no. 07, pp. 1590–1595 (2020). <http://dx.doi.org/10.21474/IJAR01/11427>

### **Peer-Reviewed Conference Articles:**

6. Priyadarshani, S., Mani, M., Maskell, D., "Examining respiratory comfort in vernacular and conventional buildings", 17<sup>th</sup> CISBAT 2023, 13-15 September, Lausanne, Switzerland (Preliminary Acceptance Received)
7. Priyadarshani, S., Rao, Roshan.R., Mani, M., "Studying Interventions to Regulate Indoor Hygrothermal Comfort in Building Integrated with End-of-Life (EoL) PV Panels", 40<sup>th</sup> European Photovoltaic Solar Energy Conference and Exhibition 2023, 18-22 September, Lisbon, Portugal (Acceptance Received)
8. Priyadarshani, S., Rao, Roshan.R., Mani, M., Maskell, D., "Investigating the role of humidity on indoor wellness in vernacular and conventional building typologies", In Proceedings of Building Simulation Applications 2022: 5<sup>th</sup> IBPSA Italy Conference – Bolzano (Italy), [doi: 10.13124/9788860461919](https://doi.org/10.13124/9788860461919)
9. Rao, Roshan.R., Priyadarshani, S., Mani, M., "An Investigation into thermal performance of buildings built using upcycled End-of-life Photovoltaic Panels", In Proceedings of Building Simulation Applications 2022: 5<sup>th</sup> IBPSA Italy Conference – Bolzano (Italy), [doi: 10.13124/9788860461919](https://doi.org/10.13124/9788860461919)
10. Priyadarshani, S., Mani, M., Maskell, D., "Discerning relative humidity trends in vernacular and conventional building typologies for occupant health," in *Proceedings of the 17th International Healthy Buildings Conference, 21-23 June, 2021*, 2021, pp. 587–598, [Online]. Available: [https://www.sintefbok.no/papers/index/38/sintef\\_proceedings](https://www.sintefbok.no/papers/index/38/sintef_proceedings). ISBN: 978-82-536-1728-2
11. Priyadarshani, S., Ghosh, M. (2019): Appropriateness of Plurality of Urban Public Open Space in context to human needs and activities: Study of Bus terminus in Kolkata, *Proceedings of Vistara: Int. Conference on Architectural Anthropology*, pp. 209-218, ISBN 978-93-885-6810-4.
12. Priyadarshani, S. (2019): Model Reclamation Framework of abandoned mines to solve socio-economic issues: Proposal for Sustainable Development of abandoned coal mines and prosperity of Tribal Community in Jharkhand, 8<sup>th</sup> Anveshan Souvenir, E-04, pp. 31.

## Projects

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### **Academic Projects:**

- **Urban Sprawl along highways between 1990 – 2020** (Oct 2020- Jan 2021), A case study of Mangalore-Bangalore, and Mysore-Bangalore highway using QGIS and GRASS.
- **Retrofitting urban public open spaces for sustainable communities** (Feb 2020- Apr 2020), A Discussion on design strategies and impacts of four case studies.
- **B.Arch. Thesis (December 2018-June 2019)**, M.I.T.T.I: Mines integrated with Tribal and Tourist Interaction, A proposal for sustainable use of Abandoned Open Cast Coal Mine in Dhanbad, Jharkhand.
- **Green Building Rating Systems (Aug 2015 -Oct 2015)**, Comparison of BREEAM, GRIHA and ECBC Ratings for Bamboo House (Jadavpur University, Kolkata)

### **Other Project Involvements:**

- **Wellbeing Achieved from Earthen Residence (WAFER) Project (UWB190086)**, (Jan 2021- Present), supported by British Academy.
- **Biodiversity survey and preliminary baseline data for select forest ranges at Kodagu**, (Jul 2020- Sept 2021), Part of Analysis and documentation team in study carried out by the Indian Institute of Science in collaboration with the Karnataka Forest Department.
- **Landscape Mapping of Hooghly Riverfront (July 2015-November 2015)**, Documentation of cultural fabric of Hooghly riverfront (“The Little Europe”, a Bengal Tourism initiative) presented to the Dutch Cultural Agency in 2015.

## Experience

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**Research Assistant (September 2018-November 2018)**, for the project “Mapping Ephemerality”, Dept. of Art and Architecture, University of California, Santa Barbara.

- Documentation of Durga Puja Pandals, and Dynamic Urban fabric of Streets of Kolkata.  
<https://www.platformspace.net/home/mapping-ephemerality>

**Intern (June 2018- July 2018)**, Urban Development and Housing Department, Government of Jharkhand.

- Building Plan Approval and Management System, GIS-Based Master Planning, and Execution of ongoing schemes like PMAY, and AMRUT.

**Architectural Trainee (June 2017- November 2017)**, Arya Architects, Ahmedabad, Gujarat.

- Architectural Design and Drawings, Preparation of DPR for various projects

## Achievements

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- Recipient of the Best Student Paper Award in the category “Technical merit and methodology” at Building Simulation Applications 2022: 5th IBPSA Italy Conference – Bolzano (Italy).
- Recipient of University Medal, Department of Architecture and Nabendu Sarkar Memorial Gold Medal, Jadavpur University for standing 1<sup>st</sup> in B.Arch(2019 batch) and best thesis paper respectively.
- Recipient of the Best Paper Award at Vistara: Int. Conference on Architectural Anthropology 2019.
- Secured 1<sup>st</sup> position in Anveshan: Student Research Convention 2019 in East Zone.
- Secured 1<sup>st</sup> Position in Design Hackathon 2018 organized by Technopreneurs’ Surrogate ventures.
- Recipient of Meera Rani Mitra Memorial Award 2017 and 2018, Prof. Amiya Bannerjee Memorial Award 2018, at Jadavpur University for standing 1<sup>st</sup> in B.Arch., university examinations.
- Secured 1<sup>st</sup> position in Design Competition for “Design of French Pavillion”, Design Yatra 2016.
- Secured 1<sup>st</sup> position in National Children’s Science Congress 2008 and 2010 at District Level (Bokaro) and Presented at State Level Congress.

## Software Skills

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BIM (Revit), Building Energy Simulations (DesignBuilder, EnergyPlus, Ecotect), Illustration & Graphic Design (Adobe Photoshop, Illustrator, Indesign), 2D&3D Modelling (AutoCad, Sketchup, 3DS Max), Rendering (Vray, Lumion), Programming (C, Matlab).