Rutvik Deshpande

rutvik.deshpande@outlook.com | (91) 8999421600

EDUCATION

National Institute of Technology (NIT), India ‘19 - Present
Bachelor of Architecture (B.Arch)

PROFESSIONAL EXPERIENCE

Digital Blue Foam, Singapore
Machine Learning Design Engineer ‘22 - Present

Associate Data Engineer ‘21 – ‘22

Research Intern ‘20 – ‘21

S. N. Pingle Consultants, Pune, India ‘20
Architectural Intern

WORKSHOPS

Synthetic Machine Creation for Net-Zero Structural Design, DigitalFUTURES 2022 ‘22

XD Urban Prototyping with Digital Blue Foam ‘21
DigitalFUTURES 2021

Personalized Generative Design ‘21
CAADRIA 2021

INVITED TALKS

"Data Driven Sustainable Building Design" at AI in AEC Conference ‘22

"Machine Learning for Better Architectural Design" at International Building Design Competition (IBDC) '21 ‘21

AWARDS

"Young CAADRIA Award", CAADRIA '23 ‘23

"Supercomputing Net-zero Structures", High-Performance Computing Innovation Challenge for the Environment (NSCC), 2nd Runners-up ‘22

CREDENTIALS

LEED Green Associate
Green Business Certification Inc. (GBCI) ‘22

SKILLS

Frontend – HTML, CSS, JavaScript, THREE.JS, TensoflowJS
Backend – NodeJS, Google Cloud Platform
Data Science – R, Python
Graphics – Adobe CS, Figma, P5.JS
Mapping – Qgis, Mabox, Leaflet, deckGL
3D Modelling – Rhino3D, Grasshopper, Revit, Blender, SketchUp

PUBLICATIONS

Journal Articles and Conference Proceedings

- **Deshpande, R.**, Patel, S., Weijenberg, C., Nisztuk, M., Corcuera, M., Luo, J., Zhu, M., 2023, Generative Pre-Trained Transformers for 15-Minute City Design
- **Deshpande, R.**, Nisztuk, M., Cheng, C., Subramanian, R., Chavan, T., Weijenberg, C., & Patel, S. V. (2022). Synthetic Machine Learning for Real-time Architectural Daylighting Prediction. 313–322. https://doi.org/10.52842/conf.caadria.2022.1.313
- Cheng, C., Li, Y., **Deshpande, R.**, Antonio, R., Chavan, T., Nisztuk, M., Subramanian, R., Weijenberg, C., & Patel, S. V. (2022). Realtime Urban Insights for Bottom-up 15-minute City Design. 435–444. https://doi.org/10.52842/conf.caadria.2022.1.435

Scientific Whitepapers

- Cheng, C., Hsain, H. E., **Deshpande, R.**, Nisztuk, M., Chavan, T., Patel, S., & Weijenberg, C. (2022). DBF Urban Insights: Realtime 15-Minute City Neighbourhood Analysis System.
- Kondratenko, A., Tam, M., Preisinger, C., **Deshpande, R.**, Bachtiar, N., Corcuera, M., Chavan, T., Weijenberg, C., Patel, S., & Nisztuk, M. (2022). Synthetic Structural Generation for Early-Stage Carbon Evaluation