## Vijesh Kumar V, M.Tech (Infrastructure Design & Management), B.Arch

Assistant Professor in Architecture (Full Time) School of Planning & Architecture, Vijayawada An Institute of National Importance, Govt. of India

E-mail: vijesh@spav.ac.in (Official), architectvijeshkumarv@gmail.com (Personal) Mob: +91 948700 5023

### **Other Affiliations**

Superintendent of Examination (PG & Ph.D) Exam Section, School of Planning and Architecture, Vijayawada

#### **Research Interests**

User Perception, Building Performance Evaluation, Simulation & Management, Automation in Architectural Industry, BIM, DT

# Educational Background

#### **M.Tech: Infrastructure Design and Management**

Indian Institute of Technology, Kharagpur, WB, 2012, CGPA - 8.73/10

• Thesis on 'Strategies for a revival plan of Agricultural Infrastructure – a case of Damodar River Basin West Bengal Region' under the guidance of Prof. Dr. Joysen GPA: 9/10

#### **B.Arch: Architecture**

National Institute of Technology, Trichy, TN, 2010, CGPA – 8.83

 Thesis on 'Ayurvedakuteeram' - Aayurvedic Healthcare and Education Centre with Special Study: Study of warm and humid climate and application in design (Studied more than 200 year old buildings to substitute the modern design concepts to achieve cost efficient and climatically responsive buildings.), under the guidance of Prof. V Ramprasad GPA: 10/10 Best Thesis Award winning Project.

# **Professional Certifications and Licenses**

2011	Registered with Council of Architecture Reg. No. CA/2011/51416
2019	Accredited Professional for Energy Conservation Building Code

## **Professional Positions**

31 Oct 2018 – Present	Assistant Professor, Dept. of Architecture, SPA Vijayawada
01 Jun 2015 – 26 Oct 2018	Assistant Professor, SAN Academy of Architecture, Coimbatore
28 Jul 2012 – 30 May 2015	Assistant professor, Dept. of Architecture, MCGAN'S, Ooty
16 Jun 2008 – 14 Nov 2008	Intern, Anand & Associates, Bangalore
Dec 2007	Intern, Vijay Architects, Trichy

## Leadership Positions

20 Jul 2022 - Present	Superintendent of Examination (PG&Ph.D), Exam Section, SPA
	Vijayawada
10 Jul 2023 – 14 Jul 2023	Coorinator 5-day Executive Development programme on 'Simulation
	and Visualization Tools for Built Environment Study'.
09 Mar 2022 – 11 Mar 2022	Coordinator, 3-Day Online Faculty Development Workshop on
	"National Education Policy 2020: Way forward in Architectural
	Education".

30 Sep 2020 - Present	Publisher for Central Public Procurement Portal (Tender
19 Apr 2020 – 06 Jan 2022 19 Apr 2020 – 06 Jan 2022	Management), SPA Vijayawada Faculty-in-charge for Computer Centre at SPA Vijayawada Faculty-in-charge for GIS Lab at SPA Vijayawada
2020 - 00 Jan 2022	Member, International Conference 'Resilience and Liveable City Planning' (RLCP2020) -Transforming Urban Systems, 10-13
	February, 2021, conducted by Dept. of Planning, SPA Vijayawada.
2020	Coordinator, Photography Club, SPA Vijayawada
2020	Coordinator, Club IO, SPA Vijayawada
2020	Coordinator, Dept. Newletter, SPA Vijayawada
2018 - 2022	Member, Website Committee, SPA Vijayawada
2018	Member, Syllabus preparation of Master of Building Engineering
	and Management, SPA Vijayawada
2016 - 2017	Coordinator, Dept. Newletter, SANAA
2012 - 2015	Programme Officer, Red Cross Society, McGAN'S
2014 - 2015	Coordinator, Dept. Newletter, McGAN'S
2012 - 2014	Library Coordinator, McGAN'S

# Consultancy

- 1. Preparation of GIS-based Master Plan for AMRUT Town Eluru (Package-1) (Eluru, Jangareddygudem and Palacole) signed a contract with the Directorate of Town and Country Planning Andhra Pradesh for a sum of Rs.80 Lakhs during 8<sup>th</sup> February 2019.
- 2. Work order for Vetting process of manuals (Education, Administration, Health), Funding Agency : Andhra Pradesh State Architectural Board, Roads And Buildings Department, Government of Andhra Pradesh, Team Member, 3.75Lakhs, 2022.
- 3. Work order for Vetting process of manuals (Community Buildings Indoor Sports Halls, Educational Buildings Library, Residential Buildings), Funding Agency : Andhra Pradesh State Architectural Board, Roads And Buildings Department, Government of Andhra Pradesh, Team Member, 3.75Lakhs, February 2024. (Ongoing)

# Awards & Honors

## Academic

- 2024 Reviewer for 2nd IEEE-sponsored International Conference on Signal Processing, Communication, Power & Embedded Systems, Centurion University of Technology and Management, Parlakhemundi, Odisha, India.
- 2024 Reviewer for International Journal Of Sustainable Construction Engineering And Technology
- 2024 *Reviewer* for Transactions on Energy Systems and Engineering Applications.
- 2023 Editorial Board Member for International Conference on Welding Technology
- 2023 Reviewer for ShodhKosh: Journal of Visual and Performing Arts.
- 2021 *Reviewer* for Journal of Building and Engineering, Elsevier.
- 2021 *Reviewer* for Engineering, Construction and Architectural Management, Emerald.
- 2010 Gold Medal for having secured the highest CGPA in B.Arch.
- 2010 'Pidilite student award for excellence in studies' for 'Optimum Space Utilization'
- 2009 Outstanding Student Award in B.Arch.
- Award winner for academic performance for all the years of academic

#### **Invited speaker**

- 1. Invited Speaker for One Day National Symposium on 'Architectural Practice: Opportunities and Challenges' on 18<sup>th</sup> November 2024 conducted by the School of Planning and Architecture, Vijayawada.
- 2. Invited Speaker for COA-TRC sponsored National Level FDP on 'Architecture and Building Services' during 07-11, October 2024 conducted by the Smt. Manorambai Mundle College of Architecture, Nagpur.
- 3. Invited Speaker for Master of Urban Design Workshop on 'Digital Tools for Urban Design', 24-25, November 2023.

- 4. Speaker 5-day Executive Development programme on 'Simulation and Visualization Tools for Built Environment Study', 10-14 July 2023, conducted by the School of Planning and Architecture, Vijayawada.
- 5. Invited Speaker for COA-TRC sponsored National Level FDP on 'Design of Building Services and System' during 09-13 January 2023 conducted by the Department of Architecture & Planning, National Institute of Technology, Patna.
- 6. Invited Speaker for DST-SERB sponsored National Level Workshop on 'Green Technology for Sustainable Development' during 19th to 20th January 2018 conducted by the department of Civil Engineering, Sri Krishna college of Engineering and Technology, Coimbatore, Tamilnadu.

# Participated and Organised

- 1. Organised a Special lecture (Webinar) on 'Introduction to BIM and Collaboration using the BIM Platform' by Techture, ISO9001:2005, MNC, scheduled on 12th October 2022.
- 2. Organised a Special lecture (Webinar) on 'Building Whole Life-Cycle Analysis using BIM Methodology' by Naveena, SPAV Alumni, on 20 September 2022.
- 3. Organised a Special lecture (Webinar) on 'BIM Based Automated Safety Checking in Construction' by Vinayak, SPAV Alumni, on 27 September 2022.
- 4. Participated in workshop conducted by ATAL Academy on 'Digital Transformation Trends in Construction Industry' from 04-08 October 2021 at SCT.
- 5. Participated in 6 day training program on 'Application of GIS in Urban Resilience Planning', SPA Vijayawada during 03-08 November 2020.
- 6. "Architecture after Covid-19", Webinar by Ar.Surinder bahga, Organized by Parul University, Chandigarh on 17 July 2020.
- "Water Future for Cities" Webinar being organized by UNESCO New Delhi, National Institute of Urban Affairs and Namami Gange Programme of the Government of India on 15 July 2020.
- 8. "The traditional water management systems- the water man of india" Webinar by Dr. Rajendra Singh organized by CGBMT on 7, July, 2020.
- 9. "Rethinking Cities: Resilient and Liveable Futures", Webinar organized by Department of Planning, SPA Vijayawada on 27, May 2020.
- 10. "Revisiting of Planning Practices & Education for New Normal" Webinar organized by ITPI-Delhi on 23, May 2020.
- 11. "Parametric Modeling", Webinar by Arturo Tedeschi and Hamid Hassanzadeh on April 15, 2020.
- 12. "How Architecture and Interior Design Reduce the Risk of COVID-19", Webinar organized by CAS Design on 6, April 2020.
- 13. "Parametric Modeling", Webinar by Arturo Tedeschi and Hamid Hassanzadeh on March 19, 2020.
- 14. Participated in FDP on 'Communicating Research and Open-access Publishing (CROP-2019)' held on 17-21 June 2019.
- 15. Participated in 'Comprehensive Training Programme on Energy Conservation Building Code-2017', held on 26-19 March 2019.
- 16. Participated in COA-TRC Program titled 'Digital Architecture' from 22nd to 26th January 2018 at Thejus College of Architecture, Thrissur, Kerala.
- 17. Particiapted in a training course for 'Bamboo Construction Workshop' from 28th to 29th March 2016 at Auroville Bamboo Centre.
- 18. Participated in the workshop 'Cost Effective Sustainable Constrution Technology' on 27thMarch 2016 at DakshinaChitra, ECR, Chennai, conducted by Ar. Eugene Pandala under AARDE Foundation.
- 19. Hands on Workhop in 'Appropriate Technologies and Building Materials Training Course in India' that featured the training of the Hollow-core interlocking block, the funicular shell roofing, the Ram Lochan tile, the Geodesic dome and other feasible technologies in

construction under the guidance of Prof. Anil Laul in December 2014 at Anangpur Building Centre, Faridabad, Haryana.

- 20. Attended the winter course 'Multi attribute decision making workshop' held from 7th to 9th December 2012 in Department of Mathematics, Indian Institute of Technology, Kharagpur.
- Volunteer for International Conference on Frontiers of Infrastructure Finance, December 28-30, 2011 organized by Vinod Gupta School of Management & RCG school of Infrastructure Design and Management, Indian Institute of Technology, Kharagpur.

# Publications

## **Research Articles**

- 1. Vijesh Kumar Valiyappurakkal, Faiz Ahmed Chundeli, "A computational analysis of trees' effects on tropical climate thermal load reduction", Research & Reviews: Journal of Architectural Designing, Volume 6, May 2024, Url: http://hbrppublication.com/OJS/index.php/RRJAD/article/view/5305.
- Vijesh Kumar V, Shabarise Y, Kapil Natawadkar, and Kartik Misra, "A Methodology to assess the constructibility of free-form buildings using building and surface performance indicators: Application to a case study", Energy and Buildings, Volume 270, Year 2022, DOI: https://doi.org/10.1016/j.enbuild.2022.112303.
- 3. Vijesh Kumar V, "Evaluation of the effect of preconception due to past experience on the perception of building performance of an Indian hostel", Building and Environment, Volume 215, Year 2022, DOI: https://doi.org/10.1016/j.buildenv.2022.108951.
- 4. Vijesh Kumar V, "Gap theory based performance analysis: A case study of an Indian hostel building with passive architectural character", Jounal of Building Engineering, Volume 41, Year 2021, DOI:https://doi.org/10.1016/j.jobe.2021.102395.
- 5. Vijesh Kumar V, "Voronoi & Sustainability", Time Space & People, April 2017, pp. 28-35.
- 6. Vijesh Kumar V, 'Understanding Sustainability', Time Space & People, November 2014, pp. 32-38.
- Vijesh Kumar V, 'Representation Of Traditional Architecture In The Context Of Sustainability: A Case of Traditional Kerala Architecture', Journal of International Academic Research for Multidisciplinary, ISSN 2320-5083, Vol. 02, Issue: 05, June 2014, pp. 282-291.
- Vijesh Kumar V, 'Representation Of Traditional Architecture In the context Of Sustainability: A Case Of Traditional Kerala Architecture', Paper Submitted for National Trends in Emerging Trends in Architecture & Allied fields – 2014.
- Vijesh Kumar V and Dr Joy Sen, 'Critical Evaluation of Agricutural Infrastructure priorities of development in the scenario of Damodar River Basin in West Bengal Region, India', Journal of International Academic Research for Multidisciplinary, ISSN 2320-5083, Vol. 01, Issue: 07, August 2013, pp. 435-451.
- 10. Vijesh Kumar V, May 2012, 'Strategies for a Revival Plan of Agricultural Infrastructure: A case of Damodar River Basin West Bengal Region', MTech Thesis in Infrastructure Design and Management, Indian Institute of Technology, Kharagpur.

### Conferences

- 1. Sivapathi G A, Vijesh Kumar V, "Review of Bim-IoT-Fm Integration on HVAC System in Commercial Buildings", International Conference on Research Trends in AI and IoT for Infrastructure and Industry (AIIII 2024), Organised by Centre for Research, Anna University, Chennai, 6-8 March 2024, Veda Publications, ISBN: 978-93-91930-97-4, pp. 750-756.
- Prajwal Gowda A, Nagireddy Vishnu Vardhan, Vijesh Kumar Valiyappurakkal, Deepak Kumar, "Review of AI-Based Digital Tools and their Productive Integration in Design Development Workflows for Architects", International Conference on Research Trends in AI and IoT for Infrastructure and Industry, (AIIII 2024), Organised by Centre for Research, Anna University, Chennai, 6-8 March 2024, Veda Publications, ISBN: 978-93-91930-97-4, pp. 729-734.

# **Student Advising**

### **UG Theses**

- 1. Angel Sebastian, May 2024, 'India Jewellery Park: Sculptural Evolution Through Form Finding Architecture', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 2. Karan Revankar, May 2024, 'NVIDIA HQ: Exploring Bioclimatism Through Form-Finding Architecture', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 3. Rayees Anna Benson, May 2023, 'Nellore International Residential School Blurring boundaries of imagination by creating holistic learning envuronments', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 4. Mohit Upadhyay, May 2023, 'Designing for Hope: The Intersection of Architecture and sustainability in Cancer Rehabilitation Centres', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 5. Minhaj Mahin, July 2022, 'Jawahar Navodaya Vidyalaya, Ernakulam', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 6. Praneta Nadupalli, June 2021, 'Indian Institute of Information and Technology Vadodra, Gujarat', c
- 7. Yamini N, June 2021, 'Nature Inclusive IT campus , Hyderabad', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 8. Krishna Prasad, June 2021, 'Revitalising Mithila Art and Culture through art and cultural center', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 9. K Volga, June 2021, 'Centre for the visually impaired at Eluru', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 10. Abhimanyu K.V, June 2020, 'Agro-artisans Hub, Reimagining Tibetan culture through people, Bylakuppe, Mysore', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 11. Arava Monish Tej, June 2020, 'Edutainment Centre at Ahmedabad', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 12. Gayathri Venkatraman, June 2020, 'Indian Institute of Human Settlements', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 13. Nihal Singh Bist, June 2020, 'International School', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 14. Shylesh Kumar, May 2019, 'Rebirth of ruins by remixing reality Civilization Museum and experience centre, Keezhadi', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 15. Karthik Patali, May 2019, 'Work-space Design Office at Bangalore', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 16. Mamatha Bannerjee, May 2019, 'Dance Institute', B. Arch Thesis, School of Planning and Architecture, Vijayawada.
- 17. Krishnendu, May 2015, 'Spaceport at Sreeharikotta', B. Arch Thesis, McGAN'S Ooty School of Architecture, Ooty.
- 18. Prasad Rao P, May 2015, 'Secretariat Complex and Hostel Facilities at Telengana', B. Arch Thesis, McGAN'S Ooty School of Architecture, Ooty.
- 19. Sarfudeen F, May 2015, 'Architect's Hub at Mumbai', B. Arch Thesis, McGAN'S Ooty School of Architecture, Ooty.
- 20. Shilpamallya S, May 2015, 'Convention & Exhibition Centre at Calicut', B. Arch Thesis , McGAN'S Ooty School of Architecture, Ooty.
- 21. Ezhilarasan J, May 2014, 'Food Craft Village', B. Arch Thesis , McGAN'S Ooty School of Architecture, Ooty.
- 22. Nikhil Jo Jacob, May 2013, 'Floating Village at Cambodia', B. Arch Thesis , McGAN'S Ooty School of Architecture, Ooty.

23.Yangchen Lamu, May 2013, 'Biodiversity Museum at Bhutan', B. Arch Thesis, McGAN'S Ooty School of Architecture, Ooty.

### **PG Theses**

- 1. Arjun Krishna, May 2024, 'Integrating probabilistic Approach in Maintenance Cost Simulation to Enhance Decision Making', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 2. Awanish Singh, May 2024, 'BIM-LEAN Framework to Enhance Interior Project Quality Delivery', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 3. Ashwin M, May 2024, 'BIM Integrated Construction Logistics Planning Framework for Residential Projects', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 4. Durai Murugan D, May 2024, 'Application of VR in Managing of Resource, Cost, Time and Reliability of Experience Centres in Real Estate Projects', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- Kalisetti Gowtham Varma, May 2024, 'A BIM Based Framework for Fire Safety Management – A Case of Commercial Building', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 6. Piyush Choudhary, May 2024, 'Enhancing Safety Measures through BIM', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 7. Sivapathi G A, May 2024, 'An Integrated Framework on Particle Swarm Optimization (PSO) for Resource Constrained Project Schedule (RCPS)', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 8. Abhishek Rastogi, May 2023, 'Effects of Stock Market on the price of construction materials in India', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 9. Aditya Mahajan, May 2023, 'A BIM-based space oriented solution for commercial facilities management, MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 10. Bidiya Shankar Jha, May 2023, 'Circular economy in building construction', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 11. Deepak Pradhan, May 2023, 'Life cycle cost of low cost residential building', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 12. Saket Patni, May 2023, 'Digital Cost Control Tool for Head Contractors', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 13. Parth Singh, June 2022, 'Comparative Analysis of Concrete 3D Printing and R.C.C. Technique for Small Scale Group Housing', MBEM Thesis, School of Planning and Architecture, Vijayawada. Co-Guide.
- 14. Krishna Kumar Srivastava, June 2022, 'Development of 5D Cost and Time-based optimization framework based on GA and BIM', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 15. Rohan Kapoor, June 2022, 'BIM Integrated financial framework for building construction projects', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 16. Vinayak S, June 2022, 'Integration of BIM-based automated safety checking in to construction Planning', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 17. Hitesh Thakur, June 2022, 'Optimization of Courtyard to achieve thermal comfort for educational building in Composite climate', M. Arch (SA) Thesis, School of Planning and Architecture, Vijayawada.
- 18. Naveena K, June 2021, 'Multi Objective Optimization of Building Life cycle cost A Study on High Rise Hotel Building in Kerala', MBEM Thesis, School of Planning and Architecture, Vijayawada.
- 19. Sanjay Kumar, June 2021, 'Minimization of disputes in construction projects through effective contract management: Case studies from India', MBEM Thesis, School of Planning and Architecture, Vijayawada. Co-Guide.
- 20. Prolay Das, June 2021, 'Risk identification and evaluation of high-rise buildings during the construction', MBEM Thesis, School of Planning and Architecture, Vijayawada.

- 21. P Likitha, June 2021, 'Thermal influence of reflective facades on a building and its contextual setting: a study on an office building', M. Arch (SA) Thesis, School of Planning and Architecture, Vijayawada.
- 22. Shabarise Y, June 2020, 'Numerical optimization on free form office buildings in Tropics', M. Arch (SA) Thesis, School of Planning and Architecture, Vijayawada.
- 23. Asha Sapna A P, May 2015, 'Design a Sustainable Residential School at Manantavadi, Wayanad', M.Arch. Environmental Architecture Thesis, McGAN'S Ooty School of Architecture, Ooty.
- 24. Aarti Maria Rebecca A, May 2013, 'Regenerative Architecture: a case on Cheyyur', M.Arch. Environmental Architecture Thesis, McGAN'S Ooty School of Architecture, Ooty.
- 25. Keerthi Naidu B N, May 2013, 'Construction and Land Use Pattern in Sub-Urban Spaces', M.Arch. Environmental Architecture Thesis, McGAN'S Ooty School of Architecture, Ooty.
- 26. K M Rajan, May 2013, 'Sustainable Urban Building Towards zero carbon environment', M.Arch. Environmental Architecture Thesis, McGAN'S Ooty School of Architecture, Ooty.

## References

Prof. Dr. Joysen, Professor

Dept. of Architecture and Regional Planning, Indian Institute of Technology, Kharagpur, West Bengal – 721302

Head of the Department, Ranbir and Chitra Gupta School of Infrastructure Design and Management

Phone (office): +91 - 3222 - 283222 e-mail: joysen @ arp.iitkgp.ernet.in

#### Dr. P. Gopalakrishnan, Associate Professor

Dept. of Architecture, National Institute of Technology, Tiruchirappalli, Tamilnadu Mob: +919994924004 e-mail: gopal@nitt.edu