

Yixuan Wang

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Add: Suzhou, Jiangsu Province, China

EDUCATION

Xi'an Jiaotong-Liverpool University	09/2020-07/2024
Dual Degree: University of Liverpool	Degree: First Class
BEng Architectural Engineering	
GPA: 2nd Year 67/100 Top 1	3rd Year 73/100 Top 1
	4th Year 68/100 Top 1

PUBLICATIONS (The symbol * is indicative of the corresponding author)

- [1] **Y.X.Wang**, Y.T.Liang, H.Z.Li, J.L.Hao* (2024) Towards a Conceptual Framework of Construction waste management to Support Sustainable Development: The Case of Smart Integrated Construction System (SICS). *Towards a Carbon Neutral Future*, vol.393, pp 523-530.
- [2] R.Fu, C.Zhang*, **Y.X.Wang**, Y.Yue, L.D.Sarno (2024) Building layout assessment on fire evacuation efficiency by integrating graph theory and virtual reality, *Journal of Building Engineering*, vol.98, 2024.
- [3] **Y.X.Wang**, Y.J.Zhang*, C.P.Au-Yong, M.A.Schnabel, Y.Peng(2024) The Use of Digital Twin (DT) in Architecture, Engineering, and Construction (AEC) Sector, *Automation in Construction*, FORCOMING.

KEY PROJECTS

Evaluating the Fire Evacuation Efficiency of Buildings Using VR Technology	09/2023-Now
Advisor: <i>Dr. Cheng Zhang</i>	<i>Research Fellow</i>
<ul style="list-style-type: none">➤ Studied the relationship between Graph Theory and building evacuation layout➤ Used Revit and CFAST to simulate building scenarios and apply in VR platform➤ Designed and invited volunteers to participate in experiments; collected questionnaires and analyzed experimental data	
Construction and Demolition Waste Management (ICSBS)	01/2023-08/2023
Advisor: <i>Dr. Jianli Hao</i>	<i>Group Leader</i>
<ul style="list-style-type: none">➤ Compared the advantages and technical problems of construction waste management in Singapore and China➤ Analyzed the significance of construction waste disposal and sustainable development in China➤ Proposed a new construction waste management framework using the analogy method➤ Published and presented research results to the 3rd International Conference on Sustainable Buildings and Structures (ICSBS 2023)	
Digital Transformation of AEC (Digital Twin)	09/2022-10/2023
Advisor: <i>Dr. Fangyu Guo</i>	<i>Research Assistant</i>
<ul style="list-style-type: none">➤ Collected 696 papers relevant to digital twin application in AEC domain from Scopus and Web of Science➤ Analyzed publication data and keywords by VOSviewer; summarized 7 key research areas for qualitative analysis➤ Completed literature review and revised to publish	
The 2nd National Garden Design and Construction Competition	09/2022-04/2023
Advisor: <i>Dr. Jun Xia, Dr. Bin Chen and Dr. Ying Chang</i>	<i>Core Member</i>
<ul style="list-style-type: none">➤ Recycled waste lightweight concrete to create concrete planters for community gardens using 3D printing➤ Designed community shared gardens plan and organized floating garden activities➤ Promoted the mental health of residents and contributed to the sustainable development of the community environment	
Fractal Façade Application in Architecture Topology Design	09/2022-12/2022
Advisor: <i>Dr Iasef Md Rian</i>	<i>Group Leader</i>
<ul style="list-style-type: none">➤ Analyzed sunlight conditions in Suzhou by Grasshopper to design façade model➤ Designed façade using AutoCAD to clarify and define fractal design concepts➤ Made a physical model of the fractal façade suitable for Suzhou	

PROFESSIONAL EXPERIENCE

Ningbo Institute of Digital Twin

Ningbo, China

Research Fellow

12/2024-12/2024

- Wrote project book for "Digital twin technologies for urban domestic waste management".
- Coordinated with Geely Auto and Nokia Corporation in path navigation for driverless cars.

Transcenta Holding Ltd.

Suzhou, China

IT Intern

06/2021-09/2021

- Provided IT support to general managers, including daily computer problems solving and information entry
- Assisted in drafting bidding documents for document management system; communicated project processes with stakeholders; analyzed project timelines, costs and quality

HONOURS & AWARDS

Outstanding graduates of Jiangsu Province in 2024	06/2024
China National Scholarship (given to Top 1% of School)	12/2023
Student Representative, Department of Architectural Engineering, XJTLU	08/2023
University Academic Excellence Award (given to Top 1 of Department)	08/2023
Excellence Award, 2 nd National Community Garden Design and Construction Competition	05/2023
Outstanding Student of Xi'an Jiaotong Liverpool University	12/2022
Student Ambassador, Chartered Institute of Building (CIOB), UK	10/2022
University Academic Excellence Award (given to Top 1 of Department)	08/2022
Third Prize, The 1 st Competition in Innovative Applications in the Future Smart Building Environment	05/2021

EXTRACURRICULAR & LEADERSHIP EXPERIENCE

Chartered Institute of Building (CIOB)

12/2022

Student Ambassador

- Presented architectural learning experience at inter-school (Tongji University, Tianjing University, etc.) exchanges as a representative of XJTLU
- Supported academic salons and communicated with students

Summer Social Practice

07/2021

Group Leader

- Conducted investigation into sustainable construction of pharmaceutical factories and measures for protecting river nearby from eutrophication
- Designed and distributed questionnaire online; collected suggestions from academic staff and peer students
- Analyzed feedback and completed detailed environmental regulation proposal

Student Career Development Association, Urban Construction Branch

09/2020-06/2022

President

- Arranged regular activities [Monthly Club Salon]; specific events [Forum for Employment Training in the AEC Field; Structural Design Competition]; Publicized the Club on social media [300 followers and 800 viewing count each article]
- Visited construction companies and held industry-sharing sessions with students
- Liaised with academic and administrative staff to arrange venues for professional selection meeting

PROFICIENCY & SKILLS

Languages : Mandarin Chinese [Native] ; English [Fluent]

Computer Skill : AutoCAD; Rhino; Revit; Navisworks; Dr.Frame; Python; Gephi; CFAST; Unity; Photoshop; Adobe Illustrator; VOS viewer; Microsoft Office