YE TANG

Southeast University, Nanjing, China | tangye@seu.edu.cn | https://github.com/inTANGibles

EDUCATION

Huazhong University of Science and Technology, Artificial Intelligence   Sept 2017 – Jan 2019
- Rank:13/158 (Linear Algebra, Calculus, Data Structures, C++)

Huazhong University of Science and Technology, Bachelor of Architecture   Jan 2019 – Jun 2023
- GPA: 3.9/4 (Architectural Thematic Design, Building Structures, Building Mechanics, Architectural History)

Southeast University, Master of Architecture   Sep 2023 – Jun 2026
- GPA: 3.7/4 (Digital Technology and Architecture, AI for Architects, Programming Fundamentals)

IUAV University of Venice, Exchange Program in Urban Planning   Feb 2025 – Jul 2025
- 19 ECTS Credits (Urban History and Architecture, Circular City Studio)

PUBLICATIONS

[1] **Tang, Y.**, Sun, J., Wang, G. *et al.* Analysis of campus crowd behaviour based on location data and physical environment data: a case study of Southeast University Wuxi Campus. *ARIN* 4, 5 (2025). https://doi.org/10.1007/s44223-025-00084-5

[2] **Tang, Y.**, Sun, J., Wang, G., Hong, W., Li, L. (2025). Analysis of Campus Crowd Behavior Based on Location Data and Physical Environment Data: A Case Study of Southeast University Wuxi Campus. In: Chai, H., Bao, D.W.N., Guo, Z., Yuan, P.F. (eds) Symbiotic Intelligence. CDRF 2024. Computational Design and Robotic Fabrication. Springer, Singapore. https://doi.org/10.1007/978-981-96-3433-0_36

[3] **Tang, Y.**, Jing, Z., Feng, Y., Qiu, S., & Li, L. (2025). RoadNetOpt – A street network optimization tool for urban sustainability. Full paper accepted to the *Proceedings of the 43rd International Conference on Education and Research in Computer Aided Architectural Design in Europe (eCAADe 2025)*.

[4] Yi, Q., Zhou, X., **Tang, Y.**, & Xu, S. (2020). The standardized design elements of affordable housing in Wuhan. *Huazhong Architecture*, 2020(3), 84–89. https://doi.org/10.13942/j.cnki.hzjz.2021.03.016

[5] **Tang, Y.**, Feng, Y., Huang, R., & Li, L. (2025, March). *From Behavior to Form: Exploring Reinforcement Learning in Architecture and Urban Design*. Presented at the panel, Ethics and Aesthetics of Artificial Images, Venice,Italy.

[6] Jing, Z., **Tang, Y.**, Feng, Y., & Li, L. (2025). *Urban road network skeleton extraction method: Improvements based on Delaunay triangulation and axis generation algorithm*. Accepted at the 2025 Annual Conference on Computational Design (CDAC2025), China.

[7] Huang, R., **Tang, Y.**, et al. (2025). Human behavior trajectory prediction simulation tool in village transformation. *Manuscript submitted for publication*.

[8] Wang, Y., **Tang, Y.**, Zhang, Y. (2025, June). *The Multifaceted Relationship Between Food Systems, Urban Morphology, and Architectural Layout: A Case Study of 11 Municipalities in Italy*. Oral presentation at the XXXII ISUF International Conference: Urban Morphology in the Age of Artificial Intelligence, Torino, Italy.

TECHNOLOGIES

Programming Languages: Python, C#

AI & Data Science: PyTorch, scikit-learn, pandas, NumPy, OpenCV, Stable-Baselines3

3D Modeling & Simulation: Rhino + Grasshopper, Unity

Digital Fabrication: 3D Printing, Arduino, ESP32, PLC programming

GIS & Spatial Analysis: QGIS, OSMnx, NetworkX, GeoPandas

Collaboration: Git, LaTeX, Overleaf, Zotero

EXPEIENCE

Quantifying Street Value in Urban Contexts – Integrating Graph Neural Networks
Participant, Tongji University digitalFUTURES 2025 – Shanghai, China   Jul 2025

Morphological Fusion – Compound Twin Project
Participant, Southeast University + ETH Zurich Workshop – Nanjing, China   Sep 2024 – Nov 2024
- Optimized 3D curved surface modeling algorithms for complex form generation
- Presented at the 40th Anniversary Academic Symposium of SEU + ETH Zurich Institute of Technology

Population Trends and Urban Space: Spatial and Behavioral Reconstruction under Multiple Social Factors
Participant, Tongji University digitalFUTURES 2024 – Shanghai, China   Jul 2024

Sound Guardian: Intelligent Sound Event Recognition System for the Hearing Impaired
Product Developer, Southeast University – Wuxi, China   Mar 2024 – Jun 2024
- Developed embedded sensing hardware for sound event recognition based on ESP32 and INMP441
- Designed Python and PyTorch pipeline for classification and visualization of urban sound events
- Built mobile UI and usage logic tailored for hearing-impaired users in everyday scenarios

Fusion of Digital Fabrication and Interactive Expression: Exploration of Oriental Sage Interactive Device
Participant, Southeast University – Nanjing, China   Sep 2023 – Jan 2024
- Co-designed an interactive installation combining YOLOv5, PLC, and motion response systems
- Explored digital construction and audience interaction under the theme "Oriental Wisdom"
- Co-developed prototype and contributed to a published paper on interactive fabrication

Space and Media Group Workshop, Future Lab
Workshop Contributor, Tsinghua University – Beijing, China   Dec 2022 – Feb 2023
- Designed spatial layouts and visual materials for Future Lab exhibition
- Developed interactive sensing systems and implemented real-time programming workflows

Architectural Design of the Cliff Post Station in Xuan'en County, Enshi Prefecture
Architectural Designer, Future Rural Construction Studio – Wuhan, China   Dec 2021 – Jan 2023
- Participated in full-cycle design of a rural public project, completed and built on site
- Led conceptual and spatial scheme design; responsible for digital modeling and architectural form development
- Collaborated on structural design adapted to cliff terrain and construction feasibility

Heritage Survey of the Original 2348 Factory, Hubei
Project Lead, Huazhong University of Science and Technology – Wuhan, China   Jul 2021 – Nov 2021
- Directed a heritage documentation team for the Original 2348 Factory
- Managed collaboration with local organizations for site access and results reporting
- Utilized 3D laser scanning to generate point cloud models and architectural drawings

Design of Adaptability of Household Parts in Apartments under the Intensive Concept
Research Assistant, Huazhong University of Science and Technology – Wuhan, China   May 2020 – Jun 2021
- Led a university innovation and entrepreneurship research project
- Conducted on-site housing surveys and apartment adaptability analysis
- Participated in writing and submitting academic publications

SCHOLARSHIP

First Class Scholarship	2023
Outstanding Graduate of HUST	
LongHu Scholarship	2021
Merit Student Scholarship	
Merit Student Scholarship	2020
Merit Student Scholarship	2019
Scholarship for National Encouragement	
Scholarship for Academic Excellence	2018
Merit Student Scholarship	

COMPETITION AWARDS

The 7th National Architectural Colleges Outstanding Graduation Design Works	June 2023
Tactical Urbanism Now#2021 Finalists	May 2022
Exhibition of Architectural Design in Developing Countries 2021	March 2022
Tsinghua Global Summer School in Architecture	July 2022
Penn Social Justice Research Academy (Weitzman School of Design)	July 2024

INTERNSHIP

MLA+, **Shenzhen, China**
Architectural Design Assistant   Aug 2022 – Nov 2022
Mentor: Cao Ruizhi. Project: Nanjiao School Design, Shenzhen Architecture Industry Ecological Intelligent Valley.

ArchDaily, **Shanghai, China**
Translation Intern   Jan 2023 – Jul 2023
Mentor: Han Shuang. Translated 27,000+ words of daily news, reports, and articles from Chinese to English.