# **Yating Wang**

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## **EDUCATION**

### Tsinghua University, School of Architecture

Beijing, China

Master of Architecture (Supervisor: Weimin Zhuang), GPA: 3.93/4.00

Sep 2024-Now

Bachelor of Architecture, GPA: 3.98/4.00

Sep 2020-Jun 2024

Minor in Sociology (Bachelor of Law), GPA: 3.96/4.00

Sep 2020-Jun 2024

**Selected coursework:** Urban Informatics, Big Data and Urban Planning, Economics of Urban Planning; Social Statistics, Social Problem & Policy; Social Network Analysis

## RESEARCH EXPERIENCE

## Tourist-Resident Narratives on Social Media for Urban Renewal in Beijing

Aug 2025-Nov 2025

Group Work | Social Media Mining + LLM Multimodal Analysis + Urban Renewal

- Analyzed 21,750 geotagged Weibo posts from 2025, covering text-image pairs across 120+ urban hotspots.
- Classified users via a BERT model (≈83% accuracy) and extracted multimodal features with LLM-based NLP for text data and CLIP image embeddings for 70000+ images.
- Measured narrative divergence via tourist-resident posting ratios, Jensen-Shannon divergence (text & image), and emotion differences across locations.
- Modeled spatial drivers using regression to inform mixed-use urban renewal strategies; Provided empirical basis for integrating online perceptions into planning, complementing traditional spatial theories like Lynch's.

**Stratification of Urban Light-meal Outlets through Spatial Modeling and Typology**Dec 2024-Feb 2025

Individual Work | Bourdieu's Theory + Spatial Classification + ML Modeling

- Collected Dianping data for 986 light-meal outlets in Beijing and, drawing on Bourdieu's theory of distinction, classified them into three types based on consumption patterns, operation modes, and target users: check-in, white-collar, and community-based.
- Used QGIS and bivariate spatial autocorrelation to examine the spatial distribution and socio-spatial determinants of each outlet type.
- Demonstrated that platform algorithms intensify this stratification by amplifying influencer-oriented outlets, while about 26% of community-based stores remain marginalized due to low visibility.

## Spatial Patterns and Drivers of Beijing's Long-Term Rental Housing

Oct 2024-Dec 2024

Group Work | Urban Policy + Housing Studies + ML Modeling

- Scraped data on 352 long-term rental apartments in Beijing and mapped spatial clusters using Moran's I to uncover location patterns and policy-relevant determinants.
- Examined how socio-spatial factors shape rental housing distribution through spatial autocorrelation analysis.
- Developed predictive models (logistic regression, SVM, Random Forest) to locate high-potential areas for equitable rental housing provision, achieving 86% classification accuracy and producing actionable site-allocation insights for policymakers.

**Evolutionary Characteristics and Influencing Factors of Beijing's Tourism Network**Jun 2024-Aug 2024 *Individual Work | Tourism Geography + Social Network Analysis* 

- Crawled 5,000+ Ctrip travel notes; built attraction-level co-visitation networks based on co-occurrence statistics of destination keywords.
- Applied modularity clustering and QAP regression; found decentralization trends and diversification toward niche attractions, supporting evidence-based optimization of route planning.

## A Human-Machine Integrated Optimization Method for Long Walkway Space

Feb 2024-May 2024

Group Work | Walking experience + Genetic Algorithm + Spatial Generation

- Built a "Genetic Algorithm-Walking Experience" interactive feedback loop using Wallacei and Grasshopper to balance spatial performance and pedestrian experience.
- Applied to various scenarios including railway stations, exhibition halls, and urban parks, achieved up to 35%

## PRACTICE EXPERIENCE

# Prototyping Neighbourhoods for a Densifying Hong Kong

Feb 2025-Jun 2025

Group Work, THU-NUS Joint Studio | GIS + Urban System Analysis + Urban Design

- Performed spatial analysis of land use intensity, public space accessibility, and ecological corridors in Hong Kong Northern Metropolis using GIS and multi-layer overlays.
- Evaluated and optimized proposals via custom dashboards developed by the FCL Global team, integrating indicators for iterative feedback and bridging quantitative diagnostics with form-making decisions.

## **Intelligent Tourist Guiding System Based on MR Technology**

Sep 2024-Feb 2025

Group Work | MR + LLM + Behavioral Modeling

- Built a mixed-reality guiding prototype in Unity for Pico HMD, using Suzhou Gardens as pilot scenes to test immersive cultural interpretation.
- Designed LLM-assisted modules for real-time interpretation, attraction recommendation, and route planning based on visual attention and multi-objective path selection, with extensions to citywalk scenarios.
- Conducted user experiments with 45 participants to evaluate system usability.

## Ethnographic Study of Blind Massage Workers in Beijing

Sep 2023-Jan 2024

Individual Work | Field Research + Interview

- Conducted in-depth interviews with three visually impaired massage workers and visited ten massage shops
  across Beijing to understand their working conditions, mobility constraints, and spatial challenges.
- Produced detailed life-history notes and thematic analyses, revealing issues of spatial exclusion, labor precarity, and gaps in disability-related urban policies, reflecting on how urban design and planning often overlook invisible labor and sensory accessibility.

## **PUBLICATIONS**

- Wang, Y., Wang, Z., & Wang, H. (2025). A human-machine integrated optimization method for long walkway space. *Journal of Asian Architecture and Building Engineering*, 1–24.
- Wang, Y., Li, J., & Lai, Y.(2025). Urban Narratives of Tourists and Residents: Social Media Data in the Context of Urban Renewal in Beijing, *Cities*. (Under review)
- Zhang, S., Wang, L., Dai, S., Chuai, Y, Chen, J., Wang, Y., Gabriele, Yi, X. and Li, H., Commenotes: Synthesizing Organic Comments to Support Community-Based Fact-Checking. *ACM Web Conference* 2026. (Under review)
- Zhang, S., Chen, J., Wang, Y., Chuai, Y, & Yi, X., Understanding How Contextual Trusted User-Centric Interventions Affect User Behavior towards Fake Videos on Short Video Platforms. *International Journal of Human-Computer Studies*. (In preparation)
- Wang, Y., & Long, Y.(2025). Healthy Enclaves in the Platform City: Understanding Light-Meal Outlets in Beijing, *Urban Governance*. (In preparation)

### • Invention Patents

Zhang, X., Wang, Y., et al. Intelligent Guided Tour Method, System, Medium and MR Head-Mounted Device Based on HMD (Substantive Examination Stage)

Zhang, X., Wang, Y., et al. Garden Attraction Recommendation Method, System, Medium and MR Head-Mounted Device Based on Visual Preference (Substantive Examination Stage)

# WORK EXPERIENCE

## Aedas, HongKong

Jul 2024-Sep 2024

Architecture Intern

- Contributed to the urban design (3 ha) in Nanshan, Shenzhen, focusing on mixed-use spatial configuration and high-density design strategies in a compact urban fabric.
- Assisted in producing masterplans and massing studies using Rhino and AutoCAD for internal design reviews.

# CAS Architectural Design&Research Co.,Ltd.

Jul 2023-Aug 2023

#### Architecture Intern

 Assisted in architectural and landscape design for the Shuangpu Campus (UCAS), with a total site area of approx. 270,000 m², contributing to masterplans, layouts, and visualizations.

# LEADERSHIP EXPERIENCE

### Tutor for undergraduate students at Tsinghua University, School of Architecture

Sep 2024-Now

• Appointed as the grade tutor for 64 freshmen students in the School of Architecture, providing ongoing guidance on mental well-being, academic planning, and university adaptation.

#### **Teaching Assistant for Environmental Behavior Course**

Sep 2024-Jan 2025

- Assisted instruction for 115 students in environmental behavior methods, including spatial cognition, behavioral mapping, and environmental preference analysis.
- Supported studio discussions, guided student experiments, and provided feedback on students' works.

#### Teaching Support Team to Taibai, Shaanxi

Jul 2022-Aug 2022

Team leader | Teaching Support Program + Industry Analysis

 Led a 9-member team on a 20-day teaching support program; taught interdisciplinary courses to 120+ students and conducted field research on rural tourism, interviewing 30+ stakeholders.

## Public Art Installation at CapitaMall, Beijing

Aug 2021-Oct 2021

Organizer | Community Installation + Design & On-site Construction

 Coordinated a 30-member team for design, material procurement, and on-site construction of a large-scale public art installation.

## Rural Revitalization Workstation Team to Gaochun, Jiangsu

Jul 2021-Aug 2021

Team leader | Rural Revitalization + Teaching Support + Landscape Design

- Organized learning experience sharing and exchange activities for 50+ local students.
- Designed a 150 m<sup>2</sup> landscape and coordinated adaptive reuse of a 200 m<sup>2</sup> farmhouse into a community inn.

### HONORS & AWARDS

2025-2026 Comprehensive Excellence Scholarship at Tsinghua University (Top 5%)	Oct 2025
2024-2025 Outstanding Undergraduate of Tsinghua University (Top 2%)	May 2025
2022-2023 Baogang Scholarship (Top 5%)	Oct 2023
2021-2022 Comprehensive Excellence Scholarship at Tsinghua University (Top 5%)	Oct 2022
2020-2021 China National Scholarship (Top 2%)	Oct 2021

# PERSONAL SKILLS

Coding: Python, Javascript, C++ Statistical Analysis: SPSS, Stata, Matlab

Modeling: Rhino, SketchUp, Grasshopper, Unity Spatial Analysis: ArcGIS, QGIS

AI: Machine Learning (CNN, GNN), NLP, LLMs

Design & Visualization: Adobe Illustrator, InDesign, Photoshop, AutoCAD, Enscape, D5 Render