

# Ganmin Yin

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📍 Room 109, Remote Sensing Building, Peking University, Beijing, China

## EDUCATION

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### Peking University

2020.09 – 2025.06 (Expected)

- Ph.D. Student in *Geographical Information Science*
- GPA 3.60 / 4.00 · Top 30%
- Supervisor: Prof. Zhou Huang & Prof. Yu Liu

### Peking University

2016.09 – 2020.06

- B.S. in *Geographical Information Science*
- GPA 3.53 / 4.00 · Top 30%
- Supervisor: Prof. Zhou Huang

## RESEARCH INTERESTS

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- Transportation & Travel Behaviour Analysis
- Urban Growth & Development Patterns
- Remote Sensing & Social Sensing
- Geospatial Artificial Intelligence & Its Applications
- Sustainable Development Goals (SDGs)

## PUBLICATIONS

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### *Journal Articles*

#### How to quantify the travel ratio of urban public transport at a high spatial resolution? A novel computational framework with geospatial big data

Ganmin Yin, Zhou Huang\*, Liu Yang, Eran Ben-Elia, Liyan Xu, Bronte Scheuer, Yu Liu  
10.1016/j.jag.2023.103245 *International Journal of Applied Earth Observation and Geoinformation* (IF=7.67)

#### ConvGCN-RF: A hybrid learning model for commuting flow prediction considering geographical semantics and neighborhood effects

Ganmin Yin, Zhou Huang\*, Yi Bao, Han Wang, Linna Li, Xiaolei Ma, Yi Zhang  
10.1007/s10707-022-00467-0 *GeoInformatica* (IF=2.77)

#### Quantifying the environmental characteristics influencing the attractiveness of commercial agglomerations with big geo-data

Zhou Huang, Ganmin Yin, Xia Peng\*, Xiao Zhou, Quanhua Dong  
10.1177/23998083231158370 *Environment and Planning B: Urban Analytics and City Science* (IF=3.51)

#### PATRIC: A high performance parallel urban transport simulation framework based on traffic clustering

Lin Wan, Ganmin Yin, Jiahao Wang, Golan Ben-Dor, Aleksey Ogulenko, Zhou Huang\*  
*Under Review*

#### The spatially varying effects of built environment characteristics on the integrated usage of dockless bike-sharing and public transport

Xiao Zhou, Quanhua Dong, Zhou Huang\*, Ganmin Yin, Guoqing Zhou, Yu Liu  
10.1016/j.scs.2022.104348 *Sustainable Cities and Society* (IF=10.70)

#### DouFu: A Double Fusion Joint Learning Method For Driving Trajectory Representation

Han Wang, Zhou Huang\*, Xiao Zhou, Ganmin Yin, Yi Bao  
10.1016/j.knosys.2022.110035 *Knowledge-Based Systems* (IF=8.14)

## Applying Ollivier-Ricci curvature to indicate the mismatch of travel demand and supply in urban transit network

Yaoli Wang, Zhou Huang\*, **Ganmin Yin**, Haifeng Li, Liu Yang, Yuelong Su, Yu Liu, Xv Shan

10.1016/j.jag.2021.102666

*International Journal of Applied Earth Observation and Geoinformation* (IF=7.67)

## High-resolution quantification of building stock using multi-source remote sensing imagery and deep learning

Yi Bao, Zhou Huang\*, Han Wang, **Ganmin Yin**, Xiao Zhou, Yong Gao

10.1111/jiec.13356

*Journal of Industrial Ecology* (IF=7.20)

## A unified spatial multigraph analysis for public transport performance

Yaoli Wang, Di Zhu, **Ganmin Yin**, Zhou Huang\*, Yu Liu

10.1038/s41598-020-65175-x

*Scientific Reports* (IF=5.00)

## Site selection for hybrid offshore wind and wave power plants using a four-stage framework: A case study in Hainan, China

Xiao Zhou, Zhou Huang\*, Han Wang, **Ganmin Yin**, Yi Bao, Quanhua Dong, Yu Liu

10.1016/j.ocecoaman.2022.106035

*Ocean & Coastal Management* (IF=4.30)

## *Presentations & Talks*

### Understanding public transport supply and demand from the perspective of public transport travel ratio in a fine spatial scale

**Ganmin Yin** · Oral

*The 29th International Conference on Geoinformatics (CPGIS 2021)* · Nov, 2021 · Nanchang · China

### Exploring the influencing factors of urban commercial agglomeration attractiveness based on mobile signaling big data

**Ganmin Yin**, Zhou Huang · Oral

*The 18th China Annual Conference on GIS Theory and Method* · Nov, 2022 · Guilin · China

## PROJECTS

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### Multi-source Trajectory Data Computing Methods and Applications for Traffic Infrastructure Optimization

2023.01 – 2026.12

*Research Assistant* · National Natural Science Foundation of China (No. 42271471)

- Explore human travel behaviour using multisource trajectory big data
- Apply big data analytics and machine learning algorithms to geographic modeling and urban planning

### Mobility as a Service: From Rigid to Smart Evolving Public Transport

2019.08 – 2021.07

*Research Assistant* · National Key Research and Development Program of China (No. 2017YFE0196100)

- Analyze the supply and demand of urban public transportation with geospatial big data
- Responsible for project management, communication, and closure

## EXPERIENCE

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### Research Assistant

2018.10 – present

Spatio-Temporal Social Sensing Lab ( $S^3$ -Lab), Peking University

- Focus on spatial-temporal data analysis and modeling
- Explore the human-environment relationship with geospatial big data
- Leverage deep learning techniques to examine issues including transportation and urbanization

### Visiting Student

2017.09 – 2017.10

UC Berkeley, Davis & Santa Barbara

- Course study and field practice
- Apply remote sensing imagery to analyze drought in northern China

## SELECTED HONOR & AWARDS

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<b>Presidential Scholarship</b> , Peking University	2022
<b>Merit (Three-Good) Student</b> , Peking University	2022
<b>LongRuan Technology Scholarship</b> , Beijing LongRuan Technology Co. Ltd.	2020
<b>Academic Excellence Award</b> , Peking University	2017

## SERVICES

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### *Peer Reviewer*

Transactions in GIS	2021
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### *Session Chair*

The 2021 International Graduate Workshop on GeoInformatics (IGWG 2021)	2021
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