# **Yizhou Wang**

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#### **EDUCATION**

#### **Cornell University**

08/2023 - 06/2025 Master of Regional Planning; GPA: 4.0/4.0 Xi'an Jiaotong-Liverpool University (XJTLU) Suzhou, China BEng Urban Planning and Design; GPA: 3.8/4.0, First-Class Honor Degree (Top 1%) 09/2019 - 06/2023 Honors: Best Overall Academic Performance, University Academic Excellence Award from XJTLU, Women's Transportation Seminar (WTS) - Infra Tech S. David Ali Memorial Graduate Scholarship

### SKILLS

Technical: Microsoft Office, Python, R, CSS, HTML, Mapbox, JavaScript, Adobe Photoshop, Illustrator, InDesign, AutoCAD, Sketchup, Rhino, SPSS, ArcGIS Pro, QGIS, Replica, Fragstats, MySQL, Tableau Expertise: GIS, Data Analysis and Management, Policy Analysis, Report Writing, Transportation and Infrastructure Planning, Quantitative Analysis, Field Survey, Interview, Urban Design

### **EXPERIENCE**

#### **Chicago Metropolitan Agency for Planning (CMAP)**

Transportation Modelling Intern

- Performed time series analysis and visualizations using Python on over 35,000 rows of National Renewable Energy Laboratory's End-Use Load Profiles to evaluate county-level energy consumption; developed interactive Dashboards by Tableau, Plotly and ArcGIS for emission by county and sectors.
- Analyzed over 1,000 rows of Vehicle Miles Traveled (VMT) data by census tract in Chicago using Replica's activity-based model; examined national OD travel behavior data from the National Household Travel Survey using Python; contributed to the Climate Action Plan for urban densification.
- Authored a memo detailing data generation process in R and ArcGIS Pro for the Motor Vehicle Emission Simulator (MOVES) model, for vehicle classification and assessing the impact of electric vehicles on transportation emissions, developed suggestions for regional transit strategies.
- Developed transit accessibility evaluation metrics by service frequency and coverage indexes; Conducted spatial autocorrelation analysis using Local Moran's I and Spatial Regime models in Python, identifying the impacts of transit accessibility on housing prices in Chicago, utilizing census data and ridership data of 866 tracts and over 10,000 stops from Chicago Transit Authority (CTA).

#### **Cornell University – Center for Transportation, Environment, and Community Health** Ithaca, NY 12/2023 - 08/2024

Research Assistant

- Developed advanced algorithms for merging road network and POI data from multiple sources, including OpenStreetMap (OSM), Overture map, TIGER/Line shapefiles, and Google API data.
- Developed and implemented distinct methods for merging different data categories by symmetry and geometry, used space indexing and spatial interpolation to optimize data accuracy and integrity by 17%.

### **Guangzhou Urban Planning Institute**

Planning Intern

- Compared the transportation and infrastructure planning regulations of 10 cities in Guangdong; participated in the formulation of the urban and rural planning technical regulations of Qingyuan.
- Wrote strategic planning reports on the transportation patterns and logistics planning for integrated rail, airport, and port systems in the development of Guangzhou's northern airport economic corridor, with a focus on Transit-Oriented Development (TOD) for the 2049 planning vision.
- Utilized a gravity-based method in ArcGIS to analyze walkability for over 20 metro stations in Suzhou.

Guangzhou, China 06/2023 - 08/2023

Chicago, IL 06/2024 - Present

Ithaca, NY

#### **Cornell University – Mui Ho Center for Cities**

Data and Graphics Assistant

- Classified and visualized urban density data of 200 major global cities using R, based on the Atlas of Urban Expansion; compared and classified the factors of density growth or shrinkage by a report.
- Conducted a literature review about the transportation pattern of waste in the Global South.
- Digitalized the spatiotemporal trajectory of Chinese enterprises' workers in Ethiopia by ArcGIS, analyzed the spatial pattern of over 1,000 infrastructure investment POIs in African countries by Python.

#### Xi'an Jiaotong-Liverpool University

Research Assistant for NSFC project- Climate Disaster Resilience of communities 01/2022 - 11/2022

- Led and managed a team of 15 members to conduct a 300-person survey on residents' subjective attitudes towards community resilience in 72 communities in Suzhou; communicated with local authorities.
- Managed, cleaned, and analyzed the survey data using R, Python and Excel.
- Reviewed literature on community resilience, extracted six community resilience-related factors using R, • established and visualized generalized linear mixed models.
- Discovered community resilience has correlation with collective efficacy and pre-disaster preparedness.

#### China Real Estate Index System & Xi'an Jiaotong-Liverpool University

Real Estate Data Analyst

- Collected and managed millions of real estate transaction data in eight Chinese cities from 2015 to 2021; filled the data by category using Python and Excel.
- Analyzed and visualized the Guangzhou housing market stock, sales and degenerating cycle of 5 years; Analyzed the housing affordability using correlation and regression analyses.

#### Summer Undergraduate Research Fellowship

Project: Game Design That Can Support Rural Revitalization

- Reviewed the history of human-environment relationship of rural settlements in southern Jiangsu.
- Conducted semi-structured interviews with residents; analyzed the relationships among stakeholders. .
- Conceptualized a game platform for rural revitalization education; evaluated the results of collaborative design through online voting and simulation.

## **Extracurricular Activities**

#### Vice President, International Planning Student Organization (IPSO) of Cornell 11/2023-Present

- Organized several international planning lectures and alumni meetups to help students discuss and network about international planning practices and job opportunities for international students.
- Conducted feedback for the department from international students to address their challenges.
- Secured a budget of \$700 from the school to organize multicultural potluck events, promoting diversity • and cultural exchange within the university community.

### 2024 American Association of Geographers Annual Meeting in Honolulu

Conference Paper and Presentation: Do Gated Communities Aggravate Urban Green Space Disparity: A Case Study in Panyu District, Guangzhou

Classified over 500 neighborhoods into 4 types by property transaction data; calculated 4 landscape indexes using land cover data by Python, found green disparity between gated and non-gated communities.

#### Lecturer of 2020/21 Semester 2 Optional Course - Digital Painting at XJTLU 03/2021 - 06/2021

- Developed plan and curriculum syllabus of 10 lectures; tutored 30 undergraduate students on painting.
- Organized recruitment of members and off-campus tutors; invited and communicated with local artists. •
- Operated artist influencer accounts, achieving 1000+ followers and 20,000+ page views. •

#### Ithaca, NY 10/2023 - 02/2024

06/2021 - 10/2021

04/2024

Suzhou, China

Suzhou, China

Suzhou, China

01/2021 - 03/2021