## SHASHA TIAN

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## RESEARCH INTEREST

Sustainable Human Settlement, Urban Resilience and Adaptation to Climate Change Geo-spatial Data Management, Urban Informatics, Natural Language Processing

## **EDUCATION**

## M.Eng. in Urban Planning

Shanghai, China

Tongji University (QS Ranking by Subject: 13)

Sept 2021 — Sept 2024

o **GPA**: 4.36/5 (Top 25%)

o **Thesis**: Research on Planning Path of Low Carbon Village Construction—Taking three villages in Zhejiang as Examples

## M.Sc. in Urban Planning and Policy Design

Milan, Italy

Polytechnic University of Milan (**QS Ranking by Subject:** 7)

Sept 2022 — Oct 2023

o **GPA**: 106/110

o Thesis: Low Carbon Village Planning Principles and Practice

## B.Sc. in Human Geography and Urban-Rural Planning

Guangzhou, China Sept 2017 — June 2021

Sun Yat-sen University (ARWU GRAS: 19)

o **GPA**: 3.86/5 (Top 25%)

## RESEARCH EXPERIENCE

## Research Fellow

Shanghai, China

AIGC Laboratory, Shanghai Planning and Design Institute Co., Ltd.

Dec 2024 — Present

- o **Integrated Urban Planning:** Contributed to strategies for innovation-oriented mixed-use renewal around universities and Bund heritage urban design guidelines.
- AI-Enhanced Research: Supported LLM corpus curation, tourist spatio-temporal analysis via NLP, and Finalist Designs of Fuxing Island MetaCity Competition.

## Graduate Student Research Assistant

Shanghai, China

Laboratory of High-Density Residential Ecology and Energy Conservation, Tongji University Sept 2021 — Sept 2024

- o Indicator Development: Constructed a rural human settlement evaluation system covering environment, infrastructure, and socio-economic dimensions.
- o **Field Research:** Conducted in-depth interviews and analyzed implemented planning projects to extract actionable insights on governance mechanisms and low-carbon village development.
- o **Comparative Case Studies:** Compared three villages through cross-case analysis, synthesizing success and failure factors to derive transferable planning insights.

#### Undergraduate Student Research Assistant

Guangzhou, China

Climate Change and Sustainable Environment Group, Sun Yat-sen University

Sept 2018 — Feb 2019

O Climate Risk Mapping: Visualized the spatiotemporal distribution of forest fires—an extreme climate hazard—using ArcGIS and automated data processing with Python. Advanced Regression Analysis: Applied a Generalized Additive Model (GAM) to access biophysical and social--economic drivers of forest fire occurrence.

## **PUBLICATION**

Shaojian Wang, Shasha Tian, et al. 2021. "Driving Factors and Carbon Transfer of Industrial Carbon Emissions in Guangdong Province under the Background of Industrial Transfer ." Geographical Research 40, no. 09: 2606–2622. [In Chinese, CSSCI].

- o **Overview:** Calculates CO2 emissions of various industries at the prefecture level during 16 years, and explores the carbon leakage pattern under industrial transfer policies.
- Personal Contribution: Organized teamwork as research group leader(supervised by Prof. Shaojian Wang), utilized the material balance method for CO2 emission calculations, and applied the structural decomposition model to assess the factors influencing emissions.

Page | 1

## RESEARCH PROJECT

## Assessment of the Impact of Environmental Regulation on Chinese Enterprises Abroad

- Overview: Examines how Chinese enterprises expanding overseas confront ESG challenges under divergent international regulations, highlighting critical risks across industries, regions, and supply chains.
- Personal Contribution: analyzed supply-chain risks, identified enablers and barriers for circular operations, and proposed recommendations integrating firm-level decisions with policy frameworks to support multi-stakeholder sustainable development.

## Spatial Distribution Patterns and Influencing Factors of Land Price in Guangzhou

- o Assessment of course "Urban Economics" (Score: 89/100)
- Overview: clarifies the spatial distribution characteristics of land price in Guangzhou and explores the influencing factors behind it.
- o **Personal Contribution:** analysed the effects of natural and social attributes with linear regression models, visualizes the spatial distribution and changing trend of land price.

# Analysis of the Current Status of Long-distance Bus Passenger Transportation under the Impact of High-speed Rail

- o Assessment of course "Urban Transportation" (Score: 91/100)
- Overview: explores advantages and disadvantages of long-distance buses under the influence of high-speed rail, and analyzes the preferences of passengers' travel modes.
- o **Personal Contribution:** scraped the schedule information of long-distance buses and high-speed train services with Python and calculated the influencing factors of the travel environment on passenger travel preferences through non-aggregated model.

## Assessing the Regional Applicability of Land Rent Theory with Spatial Syntax Analysis

- o Supported by National Undergraduate Training Program for Innovation and Entrepreneurship
- Overview: Explores the development core and internal structure of megalopolises, examining their degree of interconnection.
- o **Personal Contribution:** Managed data processing, including the calculation of accessibility using spatial syntax, and coupling degrees using correlation analysis.

## PROFESSIONAL EXPERIENCE

## Carbon Finance Researcher Intern

Shanghai, China

Industrial Bank (Fortune Global 500)

Aug 2024 — Nov 2024

- o Carbon Accounting: Collected and processed client activity data to calculate carbon emissions across Scopes 1, 2, and 3, in alignment with the GHG Protocol.
- o **Carbon Disclosure Support:** Assisted in preparing corporate carbon disclosure and ESG reports, ensuring consistency with IFRS Sustainability Disclosure Standards (ISSB).

#### **Greenquantum Analyst Intern**

Shanghai, China

Deloitte (Big Four Accounting Firms)

Jan 2024 — Mar 2024

- o **Corporate Assessment:** Calculated corporate environmental performance scores using API-based data extraction, applying weighted indicator models and normalization methods for cross-firm comparison.
- O **Index Construction**: Developed a risk control indicator system using methods such as MCDA and PCA, and scenario-based stress testing to quantify exposure and resilience.

## **Industry Research Analyst Intern**

Shanghai, China

East China Architectural Design Institute

*Nov 2021 — Jan 2022* 

- O Data crawling and processing: Utilized python and SPSS to crawl and processed data for the analysis of land use, housing price, market competition, and transportation accessibility.
- o **Feasibility Study:** Conducted investment feasibility analysis by applying cost–benefit analysis (CBA). Incorporated social cost assessments and externality evaluation (e.g., gentrification risk, equity impacts) to provide comprehensive recommendations on project viability.

## SKILLS LANGUAGE

Math: Linear algebra, Advanced Mathematics, Probability Statistics

Software: Arcgis, ENVI, Stable Diffusion, ComfyUI

Coding: C++, Python, Prolog

English: Fluent (IELTS 7.0)

Mandarin: Native