

ZONGRONG (JASPER). LI

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EDUCATION

Texas A&M University

Ph.D. in Geographic Information Systems

Advisor: Prof. Lei Zou, TAMU GEAR Lab

College Station, TX

Aug. 2025 - Expected May. 2029

University of Southern California

Master of Science, Spatial Data Science

GPA: 3.93/4

Advisor: Prof. Siqin Wang & Prof. Yi Qi, USC Spatial Sciences Institute

Los Angeles, CA

Aug. 2023- May. 2025

Nanjing Audit University

Bachelor of Economics, Finance

GPA: 3.53/5

Nanjing, CN

Sep. 2018- Jun. 2022

PUBLICATION

[1] **Li, Z.**, **Li, H.**, Yang, Y., Wang, S* & Zhu, Y. (2025). Integrating Earth Observation Data into the Tri-environmental Evaluation of the Economic Cost of Natural Disasters: A Case Study of 2025 LA wildfire. *International Journal of Applied Earth Observation and Geoinformation*. (Under Review) <https://arxiv.org/abs/2505.01721>

[2] **Li, Z.**, Su, Y., Filip, B & Zhao, W*. (2025). Buildingmultiview: Extracting 11 Multi-Scale Building Characteristics from Satellite and Street View Imagery with Large Language Models. *International Journal of Applied Earth Observation and Geoinformation*. (Under Review) <https://ssrn.com/abstract=5336448>

[3] **Li, Z.**, Xu, J., Wang, S*, Wu, Y., & Li, H. (2025). StreetViewLLM: Extracting Geospatial Information Using Multimodal Chain-of-Thought Large Language Models. *International Journal of Applied Earth Observation and Geoinformation*. (Under Second Round Review) <https://arxiv.org/abs/2411.14476>

[4] **Li, Z.**, Su, Y., Zhu, C., & Zhao, W*. (2024). BuildingView: Constructing Urban Building Exteriors Databases with Street View Imagery and Multimodal Large Language Model. (Accepted to ACM SpatialDI 2025) <https://arxiv.org/abs/2409.19527>

[5] **Li, Z.**, Li, Q., Li, H., Wang, S*, & Qi, Y*. (2024). Multi-source tri-environmental conceptual framework for fire impact analysis. *Urban Info* 3, 31. <https://doi.org/10.1007/s44212-024-00063-7>

RESEARCH EXPERIENCE

The Hong Kong University of Science and Technology (Guangzhou)

Research Assistant – Mentor: Prof. Wufan Zhao

Remote

Jun 2024 to Present

- Develop BuildingView: constructing urban building exterior databases with Street View Imagery and Multimodal Large Language Models, integrating OpenStreetMap, Google Street View, and remote sensing data to create databases for cities like New York, Amsterdam, and Singapore;
- Collect 5 years' worth of urban building exterior indicators from scholars' research to better understand fairness in the built environment across cities.

Corresponding author*, Co-first authors

- Expand the database using multi-source data, including street view imagery and remote sensing, and validate findings with data from third-party real estate transaction platforms.

University of Southern California

Los Angeles, CA

Research Assistant – Mentors: Prof. Siqin Wang, Prof. Yi Qi

September 2023 to Present

- Develop a Multi-source Tri-environmental Conceptual Framework for Fire Impact Analysis, integrating optical, thermal, and demographic data to provide a comprehensive estimation of the 2023 Hawaii wildfire damages;
- Create the StreetViewLLM tool, utilizing multimodal Chain-of-Thought reasoning in large language models for efficient geospatial information extraction;
- Leverage large language models' generative capabilities to enhance the accuracy and speed of wildfire damage predictions through advanced geospatial computation techniques.

The Hong Kong Polytechnic University

Remote

Research Assistant – Mentor: Prof. Zhiwei Li

September 2023 to August 2024

- Engaged in a comprehensive study evaluating the impact of floods on megacities globally, focusing on identifying affected regions and populations;
- Utilized Google Earth Engine (GEE) for data acquisition and analysis, leveraging tools such as VIIRS nighttime light data, and global flood databases;
- Analyzed recovery times post-flood events using changes in nighttime light data, assessing regional disparities in vulnerability and flood response.

Nanjing Audit University

Nanjing, CN

Research Assistant – Mentor: Prof. Chong Peng

September 2019 to May 2021

- Analyzed over 3 terabytes of urban data, covering aspects like traffic patterns, housing densities, and public amenities.
- Utilized GIS to map out inefficiencies in urban transportation networks, revealing areas with a 20% longer commute time than the city average.
- Assisted local governance bodies in setting up a geospatial data warehouse, streamlining the data collection and decision-making process.

INDUSTRY EXPERIENCE

City of Hope

Los Angeles, CA

Data Science Intern – Mentor: Dr. Jay Yang

January 2024 to September 2024

- Engaged in a pivotal role within a multidisciplinary team to evaluate deep learning models, such as Convolutional Neural Networks (CNNs) and Graph Neural Networks (GNNs), applied to satellite imagery for urban health data assessment;
- Focused on the intersection of urban form, structural racism, and environmental risks, contributing to the development of models that predict disparities in air pollution and urban heat islands;
- Validated methodologies through comprehensive demographic data analysis, with a record of achieving high accuracy in distinguishing socio-economic regions using unsupervised learning techniques.

NetEase Youdao

Beijing, CN

Data Analyst Intern – Business Analysis Department

January 2023 to April 2023

- Cleaned and standardized data from sales teams in more than 50 regions, education quality data from more than 2,000 colleges;
- Created a Tableau data map to help the sales team realize that localized and customized sales may significantly increase sales conversion by 30% within an acceptable cost range;
- Completed the TikTok online education industry ecological report, and helped the product team enter the relevant market for preliminary research.

BDO

Shanghai, CN

Audit Intern – Energy Company Group

December 2022 to January 2022

- Engaged in the annual audit of an energy company and 7 subsidiaries in the real estate and textile industry;
- Audited accounts such as fixed assets, intangible assets, profits, and account receivables, prepared 25 confirmation letters, conducted 7 fixed asset audits, and drafted 25 working papers;
- Interviewed financial executives about intern control and business process, spotted financial risks related to lack of management, and examined statements of cash flow and financial indicators to support going concern assumptions.

TEACHING EXPERIENCE

University of Southern California

Los Angeles, CA

Graduate Grader – Courses: SSCI 581 Concepts for Spatial Thinking & SSCI-583: Spatial Analysis and Modeling

January 2024 to Present

- Grade assignments and exams as directed by the course instructor, ensuring accurate and timely feedback.
- Attend weekly meetings with the instructor to discuss grading criteria and adjust approaches as needed.
- Provide additional grading support for projects and exams, ensuring consistency in evaluation.

HONOR AND CERTIFICATE

2025 AAG GISS Student Paper Competition Honorable Mention	March 2025
2025 EIP Student of the Year Award	March 2025
2024 LA GeoSpatial Summit - Story Map Most Suitably Applied Analysis Methodology Award	February 2025
2024 Fall GSG Professional Development Fund	February 2025
Finalist for the GISS Student Honors Paper Competition	December 2024
2024 LA GeoSpatial Summit - Story Map Participation Award	February 2024
Bronze medal in Kaggle's Child Mind Institute - Detect Sleep States	January 2023
"Outstanding Graduates" (Top 5%)	May 2022
Nanjing Audit University Outstanding Student Comprehensive Scholarship (Top 5%)	October 2021
"Internet+" University Student Innovation and Entrepreneurship Competition Campus Selection (Second Prize)	June 2021
"Advanced Individual in Social Practice"(Top 10%)	May 2021
World Chinese Debating Championship Jiangsu Regional Champion	November 2019
Nanjing Audit University Debate Tournament Second Place	May 2019

PARTICIPATION

2025 AAG Annual Meeting
 2025 LA GeoSpatial Summit
 2025 Young Scholar Symposium on Spatiotemporal Data Science
 2024 LA GeoSpatial Summit
 2024 Esri User Conference
 2024 Esri Fall Education Open House

ADDITIONAL INFORMATION

Applications: ArcGIS Pro, GEE, Python, JavaScript, Java

Languages: Fluent in Mandarin, English