Yuchi Su

geopeper | Yuchi Su | a1050336@gmail.com

Urban data and spatial analysis researcher with a focus on GIS, mobility data, and human-scale urban systems. Experienced in mobility patterns analysis, spatial data cleaning, and translating complex datasets into interpretable insights for planning and policy contexts. Interested in research and applied projects that bridge urban data, spatial modeling, and real-world decision making.

Education

National Taiwan University, Taiwan Sep. 2022 – Jun. 2026 (Expected)
B.A. in Geography Overall GPA: 4.07/4.3, Ranking: 4/72
Second Major: Public Administration, Department of Political Science
Relevant Course: Cartography and GIS, Statistics, Machine Learning and Deep Learning, Spatial Analysis, WebGIS, Data Visualization, Transport Geography, AI and Land Use

Leiden University, The Netherlands Feb. 2025 – Jun. 2025
Exchange Student

Work Experience

Member, Taipei Youth Advisory Committee Jan. 2025 – Present
Taipei City Government Taipei, Taiwan
- Contribute to pedestrian-rights policy work within the Social Equity Working Group
- Initiated a proposal to systematically review parking-space data, encouraging government agencies to open datasets and support further spatial analysis

Summer Research Intern Jun. 2025 – Aug. 2025
Department of Urban Planning, The University of Hong Kong Hong Kong SAR
- Conducted an independent research project, "Why the 15-Minute City Fails: Diagnosing Spatial Mismatch in High-Density Environments," using Python, R, and QGIS
- Analyzed over 440,000 GPS records and open datasets, applying spatial statistics and regression to evaluate mismatches between the 15-minute city model and actual behavior

Member, NTU Transportation Committee / Campus Planning Group 2023 – 2025
National Taiwan University Taipei, Taiwan
- As a student representative and Vice President of NTU Student Association, contributed to campus improvements including bike-share station rebalancing, shuttle services, and nighttime lighting

Projects

Taipei Loading-Zone Planning Dashboard Oct. 2025
3rd Place, AI x Smart City Data Competition, organized by the Ministry of Economic Affairs Taiwan
- Built a road-grid-based "loading-zone pressure model" integrating POI data, parking zone locations, hourly flows, and industry weights to quantify supply–demand gaps in Taipei commercial areas
- Developed an interactive WebGIS dashboard for scenario simulation and planning support

NTU Nighttime Lighting Visualization Map Nov. 2025
Independent Project, NTU Student Association Taipei, Taiwan
- Created a custom iOS app with Swift/Xcode for brightness data collection, combining GPS tracking with manual measurements to build a campus nighttime light-environment dataset
- Built a WebGIS integrating brightness data, light-pollution zones, and safe walking routes

Skills

Programming Python (geopandas, scikit-learn, PyTorch), R, basic web (HTML/JavaScript), Swift
Software QGIS, ArcGIS Pro
Languages Chinese (native), English (fluent)