Si-Xian Li

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EDUCATION

National Taiwan University   Taipei, Taiwan

Bachelor of Science in Geography   Sep 2024 - Jun 2028
- Academic achievement: Dean's List Award, Undergraduate Honors Program (in progress)
- Coursework: Statistics / Calculus / Probability / Programming / Data Analysis and Machine Learning / Data Structure / Spatial Analysis / Remote Sensing / Cartography and Geographic Information System.

SKILLS

Languages & Libraries: Python / C++ / JavaScript / SQL / R / Pandas / NumPy
Tools & Platforms: Figma / Photoshop / Tableau / HTML / CSS / ArcGIS / QGIS / GitHub Actions

WORK EXPERIENCE

National Taiwan University   Taipei, Taiwan
Undergraduate Researcher   Oct 2025 – Present

Geospatial Computing Lab, Advisor: Tzai-Hung Wen
- Quantified shifts in work patterns before and after COVID-19 using Google Trends data from 2016 to 2025.
- Processed and analyzed large-scale search query data to identify temporal shifts in public interest and behavior.
- Collaborated with researchers in India to conduct spatiotemporal analysis, building upon the findings from the Taiwan study.

Academia Sinica   Taipei, Taiwan
Research Assistant   Sep 2025 - Present

depositar lab, Institute of Information Science, Advisor: Tyng-Ruey Chuang
- Developed a computational platform capable of handling soundscape and landscape research data from different recording sites, and used audio embeddings to construct spatiotemporal medium of soundscape diversity.
- Processed and integrated 200+ hours of audio data to support soundscape mapping platform.
- Maintained a structured archive for research datasets to ensure long-term accessibility and reproducibility.

Summer Intern   Jul 2025 - Aug 2025

Geographic Information System Center, Advisor: Tyng-Ruey Chuang
- Processed and georeferenced Japanese colonial-era historical maps from nearly 100 years ago, and built an interactive HTML-based web map to visualize spatial and temporal patterns.
- Prepared and structured spatial datasets for web-based visualization, supporting interactive geographic digital map exploration.
- Developed a static website to showcase project deliverables, integrating interactive map embeds and 3D imagery demonstrations; managed version control and continuous publishing via GitHub.

PROJECT EXPERIENCE

Finding — Vibe-based Place Search App   Jan 2026 - Present
- Building an APP (Streamlit + FastAPI) that queries the Google Places API and ranks nearby venues using rule-based relevance scoring from place types and review snippets.
- Reduced external Google Places Details API calls by ~88% with on-disk JSON caching, achieving an average details cache hit rate of 87% across 200 requests on Cloud Run.

ChemPion: Chemical Property & Inventory Summary System   Feb 2025 – Jun 2025
- Built a Python chemical inventory system integrating SQLite and Pandas for real-time lab resource management.
- Implemented web scraping with BeautifulSoup to automate chemical property retrieval and generate data visualization reports.

An Analysis of Public Transport Accessibility in Kaohsiung City   May 2023 - Oct 2023
- Awarded 1st Prize, National High School Geographic Information System Competition in Taiwan
- Evaluated transit construction benefits by quantifying accessibility in Kaohsiung at scale ($\approx$200 routes; 2,000+ stops), producing comparative metrics for pre/post scenarios.

OTHER ACTIVITIES

NTU Varsity Track and Field team   Sep 2025 - Present
- Specialty: 400m (PB: 54.80) / 800m (PB: 02:07.15) / Half Marathon

Academic Division, NTU Geography Student Association   Jul 2025 - Present
- Coordinated departmental events, including career development workshops, the NTU Azalea Festival (Department Expo), and academic guidance sessions for prospective high school students.