

YANBING CHEN

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SKILLS

GIS and Mapping: ArcGIS Pro, ArcMap, QGIS, ArcGIS StoryMaps, Mapbox, PostgreSQL, Google Earth, ENVI

Programming: Python, JavaScript, HTML & CSS, XML, SQL, Net logo

Library: Network X, ArcPy, Geopandas, Geoplot, Plotly, D3 JS, Leaflet JS, Mapbox GL JS, NumPy, Pandas

Graphic Design: Adobe Illustrator, Photoshop, Figma, Canvas

Visual Analytics and Data Analysis: CARTO, Tableau, PowerBI, Gephi, R

Platforms & Frameworks: WordPress, GitHub, Google Colab, Jira

Language: Chinese (Native), English (Proficient), Cantonese (Basic), French (Basic)

EDUCATION

University of Wisconsin – Madison, Wisconsin, United States

Sep 2023 - Exp. May 2028

M.S. (2023-2025) and Ph.D. (2025-2028) in Cartography and Geographic Information Systems

- Relevant Coursework: Cartography, Interactive Cartography & Visualization, Spatial Analysis, Python

McGill University, Quebec, Canada

Sep 2019 - May 2023

B.A. in Geography and Economics (3.81/4.0)

- Relevant Coursework: Advanced GIS, Geospatial Web, Geocomputing, Remote Sensing

WORK EXPERIENCE

GISphere Team Leader, GISphere, online

Jun 2022 - Present

- Overseeing the **content management** for the [GISphere Institution Guide](#), a comprehensive resource for GIS professionals and students, encompassing details on 500+ GIS graduate programs and 2000+ faculty
- Leveraging **LLM and Python web scraping** scripts to extract information on geography department worldwide
- Providing insights for database design with IT team and ensuring the platform's content accuracy and relevance

GIS Assistant, Geographic Information Center at McGill

Sep 2022 - May 2023

- Hosted workshops on **ArcPy and Mapbox**, introduced participants to advanced techniques in spatial analysis
- Assisted students and researchers in effectively using ESRI products, including **ArcGIS Pro, ArcMap, and StoryMap**

RESEARCH & PROJECT EXPERIENCE

Project Leader, Inter-lab Collaboration Project

Aug 2022 - Present

Investigating Mobility and Research Themes through Faculty Hiring Network in GIScience

- Leading a team to collect comprehensive data on 946 tenure-track GIScience faculty from various institutions worldwide
- Utilizing Gephi to conduct **network analysis** and map faculty placements based on their graduate programs
- Using Python for data cleaning and generating **word clouds** to analyze research trends within 946 GIS graduate programs

Undergraduate Researcher, Roger Tomlinson Lab for GIScience at McGill

May 2022 – Aug 2023

Animate and visualize historical data with ArcGIS Pro, Net Logo, and Geovisualization tools

- Leveraged **agent-based model and ArcGIS Pro** to recreate possible ancient travelling routes
- Used **Plotly for Python** to generate dynamic space-time paths showing historical agent movements

Project Leader, GEOG384 Principles of Geospatial Web at McGill

Sep 2022 – Dec 2022

A historical storymap for California Gold Rush

- Orchestrated an historical story map focusing on the Chinese immigration narrative during the California Gold Rush

- Employed **Mapbox** for base map customization and used **JavaScript** to bring interactivity to the story map

Mobile Tracking Web App

- Designed a **user interface** and incorporated a tracking function that captures user location at 30-second intervals
- Achieved route visualization in Mapbox and added a **space-time cube representation** via Plotly

PUBLICATIONS

- **Chen Y.**, Kang Y. (2023). [Investigating Demographics and Mobility through Faculty Hiring Network in GIScience](#). *Spatial Knowledge Conference Proceedings*
- Kang, Y., Wang, Y., Zhang, J., Liu, H., Rao, J., Liu, Y., Zhou, B., Chen, P., **Chen, Y.**, Tong, X., & Ye, S. (2023). GISphere: A Crowd-Sourced Database of Global GIS Graduate Education. *CPGIS 2023 short paper*.
- Sengupta, R., Vankeerberghen, G., Wen, R., Rao, J., **Chen, Y.** (2023). [GIS-enabled historiography to determine travel routes during the Western Han period via agent-based models and least-cost path analysis](#). *Transactions in GIS*, 27(4), 1090–1103.

MAP GALLERY

- ["To Incarcerate or to Educate?"](#) - A map comparing the cost of inmates in U.S. states with their spending on education.
- ["Just Another Day in America"](#) - The Map designed for UW-Cartography Lab 2024 Map Challenge.
- ["Behind Bars"](#) - A map showcasing a comparison of incarceration rates across U.S. states.
- ["Vermont Trails"](#) - A Vermont Hiking Guide.
- ["Chinese Restaurants in Barbados"](#) - The Map designed for Project: Chinese Immigrants in Barbados.

CONFERENCE AND PRESENTATIONS

- Investigating Mobility and Research Themes through Faculty Hiring Network in GIScience 2024
CaGIS and UCGIS symposium, Columbus, Ohio (June 3-6, 2024).
- GISphere: Facilitating Global Connections in Geographic Information Science (GIScience) Education, 2024
Research, and Practice
AAG 2024 Annual Meeting, Honolulu, Hawaii, United States (Apr 19, 2024).
- Digital Cartography and Historical Insights: Mapping a New Course for the Past in the Digital Age 2024
AAG 2024 Annual Meeting, Honolulu, Hawaii, United States (Apr 18, 2024).
- Academic Recruiting in GIScience 2023
Spatial Knowledge Conference, Banff, Canada (Feb 16-19, 2023).
- Mobile Tracker of VGI, Using Story Map as visual storytelling 2022
McGill GIS Day, Montreal, Canada (Nov 14, 2022).

GRANTS & AWARDS

- [CAGIS Rising Award](#), The Cartography and Geographic Information Society 2022
Kang Y., **Chen Y.**, Zhou B., Gu Z. Characterizing and Promoting Cartography and GIS Graduate Programs through Research Theme Discovery and Online Seminars

SCHOLARSHIPS

- 2024 Trewartha Conference Travel Awards 2024
- 2023 University Graduate Fellowship, University of Wisconsin – Madison 2023
- 2022 Dean's Honour List, McGill University 2022
- 2022 Arts Research Internship Awards, McGill University 2022
- 2022 Arts Undergraduate Awards, McGill University 2022