

Sigao Li

MSc Student
University of Bristol Business School

✉ sigao.li@outlook.com

🌐 sigaoli.com

☎ +44(788)725-5031

👤 SigaoLi

RESEARCH INTERESTS

- Operations Research
- Location Decision-making
- Human Mobility
- Social Media and Web Analytics
- Healthcare and Public Health
- GeoAI and GIScience

EDUCATION

- Aug 2025(Exp) **MSc in Business Analytics** *University of Bristol - Bristol, EN, UK*
• Research Paper: Understanding and Predicting Regularity, Diversity, and Adaptability in Human Mobility
- Oct 2023 **MSA in Spatial Analysis** *Toronto Metropolitan University - Toronto, ON, CA*
• Research Paper: Analyzing Lowe's Failure in Canada from a Geographical Perspective
- Jun 2022 **BA(Hons) in Geographic Analysis | Minor in Economics** *Ryerson University - Toronto, ON, CA*
• Research Paper: The Impact of Population Distribution in the Toronto CMA on Ethnic Retail Location

RESEARCH EXPERIENCE

- Jun 2025
– Present **Research Assistant - Sustainable Development Research** *University of Bristol - Bristol, EN, UK*
• Developed an automated system using LLM to identify webpage structures and scrape publicly listed companies' CSR/ESG reports, and extract report metadata to build a sustainability dataset.
- May 2025
– Present **Research Assistant - AI & Operations Research** *University of Bristol - Bristol, EN, UK*
• Leveraged Vision Language Models to extract environmental cues and create a dataset to fine-tune LLMs for natural language-based accident trajectory simulation and avoidance.
- Dec 2024
– Present **Research Assistant - Transportation Big Data** *University of Bristol - Bristol, EN, UK*
• Built a demand forecasting model using Graph Transformer and integrated Bayesian hyperparameter optimization with the PyEPO framework to enable predictive decision support for trip dispatching.
- Jul 2024
– Apr 2025 **Research Assistant - Natural Language Processing** *University of Bristol - Bristol, EN, UK*
• Integrated regulatory ratings, public reviews, and government expenditure data to evaluate the impact of party control changes in England on care home quality.
- Mar 2024
– Sep 2024 **Research Assistant** *Cognitive Aging Lab & Toronto Metropolitan University - Toronto, ON, CA*
• Preprocessed questionnaire data for the "Active Aging Training" Project's focus group.
• Proofread the "Future Thinking" Project questionnaire and provided document translation.
• Coordinated the planning and conduct of the "Aging in Community" Symposium.
- Sep 2022
– Dec 2022 **Research Assistant - Health Geography** *Ryerson University - Toronto, ON, CA*
• Analyzed questionnaire data using Regression Analysis to examine the correlation between store accessibility, consumption frequency, and consumer health status.
• Modelled consumer trajectories with Network Analysis to determine the consumer's activity area and enhanced address accuracy by Geocoding with Google APIs.
- Jul 2022
– Aug 2022 **Research Assistant - Geographic Information System** *Ryerson University - Toronto, ON, CA*
• Developed an ETL pipeline in Python to aggregate Toronto GTA election results and identify candidates' races to examine electoral diversity and inclusion.
• Conducted exploratory data analysis and created Excel pivot tables for data interpretation.
• Wrote tutorial guides on trade area calculation methods for graduate students in the lab group.

INTERNSHIP EXPERIENCE

- Jan 2025
– Apr 2025 **Business Analytics Consultant** *IBM & University of Bristol - Bristol, EN, UK*
• Designing a web-based portal that leverages natural language processing to perform sentiment analysis on the company's annual report, tweets and responses.
• Performs MOST, SWOT and PESTLE analysis based on the report and visualises the results.

Jan 2023 – Apr 2023	Geospatial Data Analyst	<i>PiinPoint</i> - Kitchener, ON, CA
	<ul style="list-style-type: none"> Implemented k-nearest neighbours algorithm for customer segmentation and built an urbanization index for market screening, optimizing the retail network by 15%. Integrated machine learning algorithms into GIS workflows and revamped enterprise database schema with Devbox, enhancing operational efficiency by 30%. 	
Jun 2021 – Aug 2021	Business Analyst	<i>iQIYI, Inc.</i> - Shanghai, SH, CN
	<ul style="list-style-type: none"> Conducted market research on "How to transform film and television entertainment intellectual property into offline business ventures", and "Emerging trends in large Brick-and-Mortar complexes". Devised data-driven site selection strategies that guided corporate transformation initiatives, and presented comprehensive demonstration reports to company executives. 	
Apr 2021 – Jun 2021	Data Analyst	<i>MioTech</i> - Shanghai, SH, CN
	<ul style="list-style-type: none"> Conducted ESG research by leveraging Excel and BI software for web scraping economic data from government and revenue agencies, reducing data collection time by 50%. 	
Feb 2021 – Apr 2021	Product Analyst	<i>Sohu.com Limited</i> - Beijing, BJ, CN
	<ul style="list-style-type: none"> Collaborated with the development team on competitive research, performed diagnostic analysis of user behaviour, identified trends and patterns, and boosted user engagement and retention by 20%. 	

VOLUNTEERISM

Jul 2024 – Present	Academic Assistant	<i>Chinese Students and Scholars Association Bristol</i> - Bristol, EN, UK
	<ul style="list-style-type: none"> Collecting academic resources, writing WeChat articles on admission timelines, and helping students understand key milestones in the admission process. 	
Apr 2024 – Present	Director, GISource	<i>GISphere</i> - Worldwide
	<ul style="list-style-type: none"> Collaborating with a cross-functional team in the development and deployment of a custom LLM chatbot based on multiple AIGC platforms for information collection and technical support. Led a team of 4 using Agile methods to design an Azure-based ETL pipeline to scrape and load Google Sheet data into a MySQL database, reducing task time by 80%. Published over 50 blogs about GIS-related program applications with more than 50k reads. 	
May 2022 – Mar 2024	Campus Partner	<i>GISphere</i> - Worldwide
	<ul style="list-style-type: none"> Promoted strategic cooperation with Esri China, and organized the "GIS Open Course Week for International Students" event, attracted more than 10k views. Co-produced "GISphere Study Abroad Guide - Big Data Report White Paper(2023)". 	
Aug 2021 – Aug 2022	Campus Ambassador	<i>GeoScene Information Technology Co. Ltd</i> - Beijing, BJ, CN
	<ul style="list-style-type: none"> Spearheaded international promotional campaigns, expanded to over 300 universities worldwide and attracted more than 10k students, achieving a 15% increase in promotional material downloads. 	

HONOR & AWARDS

May 2024	Think Big Postgraduate Scholarship(£6,500)
Aug 2023	President's Prize Award, Canadian Cartographic Association Mapping Competition
May 2023	Graduate Development Award(C\$700)
Sep 2022	Arts Grad Funding Spatial(C\$5,000)
May 2021	Global University Python Quantitative Simulation Investment Competition
	<ul style="list-style-type: none"> Individual Final: 6th; Group Semi-finals: 3rd
Aug 2020	GLO-BUS Business Strategy Simulation
	<ul style="list-style-type: none"> Ranked into "Global Top 50 Performance Criteria"
Sep 2018	Guaranteed and Renewable Scholarship(C\$500)

TECHNICAL COMPETENCIES

Data Analytics:	Python, R, SPSS, SQL, NoSQL, JavaScript, HTML, CSS, Databricks, Hadoop, AWS, Git, Linux
Frameworks:	PyTorch, TensorFlow, Keras, scikit-learn, NLTK, NetworkX, PuLP, Pyspark, GeoPandas, ArcPy
Others Tools:	Tableau, Power BI, Google Analytics, Qualtrics, Esri Suite, QGIS, AutoCAD, Microsoft Suite
Certificates:	Artificial Intelligence (University of Toronto), Data Science (University of Waterloo)