

Sigao(Peter) Li

Business Analyst/Data Analyst

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EDUCATION

- Jun 2024 **Summer School in Economic Networks** *University of Oxford - Oxford, EN, UK*
- May 2024 **Certificate in Artificial Intelligence** *University of Toronto - Toronto, ON, CA*
- Dec 2023 **Certificate in Data Science** *University of Waterloo & University of Toronto - Kitchener, ON, CA*
- Oct 2023 **Master of Spatial Analysis in Spatial Analysis** *Toronto Metropolitan University - Toronto, ON, CA*
- Major Research Paper: Analyzing Lowe's Failure in Canada from a Geographical Perspective
- Jun 2022 **Bachelor of Arts(Honours) in Geographic Analysis** *Ryerson University - Toronto, ON, CA*
- Individual Research Paper: The Impact of Population Distribution in the Toronto Census Metropolitan Area on Ethnic Retail Location

RESEARCH EXPERIENCE

- Mar 2024 – Present **Research Assistant** *Cognitive Aging Lab & Toronto Metropolitan University - Toronto, ON, CA*
- Analyzing survey data from the Active Aging Training Project's focus groups, and developing Python automation scripts to speed up the research process.
 - Proofread the Future Thinking Project questionnaire and provide technical support.
- Sep 2022 – Dec 2022 **Research Assistant** *Ryerson University - Toronto, ON, CA*
- Analyzed survey data using exploratory spatial data analysis and regression analysis to examine the correlation between store accessibility, consumption frequency, and consumer health status.
 - Enhanced business address accuracy by Geocoding with Google APIs, and modelled consumer trajectories with network analysis(origin-destination matrix model) using ArcGIS Pro.
- Jul 2022 – Aug 2022 **Research Assistant** *Ryerson University - Toronto, ON, CA*
- Engineered a Python automation tool for spatial ETL pipeline that aggregates Toronto GTA election results and identifies the race of candidates for use in examining electoral diversity and inclusion.
 - Conducted exploratory spatial data analysis and created Excel pivot tables for data interpretation.

INTERNSHIP EXPERIENCE

- Jan 2023 – Apr 2023 **Geospatial Data Analyst** *PiinPoint - Kitchener, ON, CA*
- Build an urbanization index with QGIS and applied circular method for market screening, implemented clustering algorithms for customer segmentation, optimizing the retail network by 15%.
 - Integrated machine learning algorithms into traditional GIS workflows and revamped enterprise database schema with Devbox, enhancing operational efficiency by 30%.
- Jun 2021 – Aug 2021 **Business Analyst** *iQIYI, Inc. - Shanghai, SH, CN*
- 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** *MioTech - Shanghai, SH, CN*
- Conducted ESG research by leveraging Excel for web scraping data from government and revenue agencies, reducing data collection time by 50%.
 - Created various analytical dashboards using Excel and BI software to depict key KPIs.
- Feb 2021 – Apr 2021 **Product Analyst** *Sohu.com Limited - Beijing, BJ, CN*
- Performed diagnostic analysis of user behaviour, identifying trends and patterns, boosting user engagement and retention by 20%.
 - Collaborated with the development team on competitive research, creating detailed reports that directly contributed to the development of new features.

PROJECTS

- Jan 2024 – Apr 2024 **Intelligent Agent for Portfolio Strategy Optimization** [GitHub Link](#)
- Designed a stock trading agent using transformer models for price prediction, genetic algorithms and modern portfolio theory to achieve strategy optimization that maximizes risk-adjusted returns.
- Sep 2023 – Dec 2023 **Forest Fire Monitoring Using Deep Neural Network** [GitHub Link](#)
- Transformed satellite imagery into NLP features and developed a CNN model that utilized batch normalization, dropout, and data augmentation for wildfire detection, achieving over 97% accuracy.
- Sep 2023 – Dec 2023 **Real-Time Credit Card Fraud Detection** [GitHub Link](#)
- Integrated Apache Kafka and Pyspark for real-time data streaming and distributed data processing, and leveraged custom MLib transformers and FNN models to detect fraud with an accuracy of 99%.

VOLUNTEERISM

- Apr 2024 – Present **Director, GISource** *GISphere - Worldwide*
- Helping students interested in professional development and graduate programs access up-to-date information on global M.S./Ph.D. opportunities.
 - Published over 40 blogs about GIS-related program applications with more than 50,000 reads.
- Sep 2023 – Present **Project Developer** *GISphere - Worldwide*
- Leading 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%.
 - 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.
- May 2022 – Present **Campus Partner** *GISphere - Worldwide*
- Promoted strategic cooperation with Esri China, and organized the "GIS Open Course Week for International Students" event.
 - Co-produced "GISphere Study Abroad Guide - Big Data Report White Paper(2023)".
- Aug 2021 – Aug 2022 **Campus Ambassador** *GeoScene Information Technology Co. Ltd - Beijing, BJ, CN*
- Spearheaded international promotional campaigns, expanded outreach to over 300 universities worldwide and attracted more than 10,000 event attendees, achieving a 15% increase in promotional material downloads.

HONOR & AWARDS

- Aug 2023 **Canadian Cartographic Association Mapping Competition**
- President's Prize Winner(1st) at University Level
- May 2023 **Graduate Development Award(\$700)**
- Sep 2022 **Arts Grad Funding Spatial(\$5,000)**
- Jun 2022 **Dean's List | Faculty of Arts(2021-2022)**
- May 2021 **Global University Python Quantitative Simulation Investment Competition**
- Individual Final: 6th; Group Semi-finals: 3rd
- Aug 2020 **GLO-BUS Business Strategy Simulation**
- Ranked into "Global Top 50 Performance Criteria"
- Sep 2018 **Guaranteed and Renewable Scholarship(\$500)**

TECHNICAL COMPETENCIES

Data Analytics: Python, R, JavaScript, HTML, CSS, SQL, NoSQL, Databricks, Hadoop, Azure, AWS, Git, Linux
Frameworks: PyTorch, TensorFlow, Keras, scikit-learn, NLTK, Pyspark, GeoPandas, ArcPy, Matplotlib, Seaborn
Spatial Analysis: ArcGIS, ArcMap, QGIS, MapInfo, PCI Geomatica, AutoCAD, Civil 3D, GeoDa, SPSS, Survey123
Others Tools: Tableau, Power BI, Alteryx, Google Analytics, MS Office Suite, Adobe Suite, PTC Creo, SketchUp