

Sigao(Peter) Li

Business Analyst/Data Analyst

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EDUCATION

Jun 2024	Summer School in Economic Networks	<i>University of Oxford - Oxford, EN, UK</i>
Apr 2024	Certificate in Artificial Intelligence	<i>University of Toronto - Toronto, ON, CA</i>
Dec 2023	Certificate in Data Science	<i>University of Waterloo - Kitchener, ON, CA</i>
Oct 2023	Master of Spatial Analysis in Spatial Analysis	<i>Toronto Metropolitan University - Toronto, ON, CA</i> <ul style="list-style-type: none">Major Research Paper: Analyzing Lowe's Failure in Canada from a Geographical Perspective
Jun 2022	Bachelor of Arts(Honours) in Geographic Analysis	<i>Ryerson University - Toronto, ON, CA</i> <ul style="list-style-type: none">Individual Research Paper: The Impact of Population Distribution in the Toronto Census Metropolitan Area on Ethnic Retail Location

RESEARCH EXPERIENCE

Mar 2024 – Present	Research Volunteer	<i>Cognitive Aging Lab & Toronto Metropolitan University - Toronto, ON, CA</i> <ul style="list-style-type: none">Analyzing survey data from the Active Aging Training Project's focus groups, offering assistance with meeting documentation and technical support.Leading a team of 5 to develop Python automation scripts to speed up the research process.
Sep 2022 – Dec 2022	Research Assistant	<i>Ryerson University - Toronto, ON, CA</i> <ul style="list-style-type: none">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	<i>Ryerson University - Toronto, ON, CA</i> <ul style="list-style-type: none">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.

PROFESSIONAL EXPERIENCE

Jan 2023 – Apr 2023	Geospatial Data Analyst	<i>PiinPoint - Kitchener, ON, CA</i> <ul style="list-style-type: none">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	<i>iQIYI, Inc. - Shanghai, SH, CN</i> <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 - Shanghai, SH, CN</i> <ul style="list-style-type: none">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	<i>Sohu.com Limited - Beijing, BJ, CN</i> <ul style="list-style-type: none">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

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|------------------------|---|-----------------------------|
| Jan 2024 –
Apr 2024 | Intelligent Agent for Portfolio Strategy Optimization
• 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. | GitHub Link |
| Sep 2023 –
Dec 2023 | Forest Fire Monitoring Using Deep Neural Network
• 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. | GitHub Link |
| Sep 2023 –
Dec 2023 | Real-Time Credit Card Fraud Detection
• Integrated Apache Kafka and Pyspark for real-time data streaming and distributed data processing, and leveraged custom MLLib transformers and FNN models to detect fraud with an accuracy of 99%. | GitHub Link |

VOLUNTEERISM

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| Apr 2024 –
Present | Director, GISource
• 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. | <i>GISphere - Worldwide</i> |
| Sep 2023 –
Present | Project Developer
• 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. | <i>GISphere - Worldwide</i> |
| May 2022 –
Present | Campus Partner
• 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)". | <i>GISphere - Worldwide</i> |
| Aug 2021 –
Aug 2022 | Campus Ambassador
• 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. | <i>Esri China - Beijing, BJ, CN</i> |

HONOR & AWARDS

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| Aug 2023 | Canadian Cartographic Association Mapping Competition
• President's Prize Winner(1 st) 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: 6 th ; Group Semi-finals: 3 rd |
| Aug 2020 | GLO-BUS Business Strategy Simulation
• Ranked into "Global Top 50 Performance Criteria" |
| Sep 2018 | Guaranteed and Renewable Scholarship(\$500) |

TECHNICAL COMPETENCIES

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