

Ming Liu

5 Soudan Av, M4S 0B1 – Toronto, Ontario

☎ +1 (647) 937 9629 • ✉ liu.mingzheng@outlook.com • 🌐 mingliuuu.vercel.app/en
in mingliuuu • 🌐 MingLIUUU

Skills

Technical Skills: Microsoft Office Suite, Power BI, Tableau, Oracle, SAS, Sharepoint, Looker, Git; Programming skills in Python, SQL, Java, Javascript, C, R, VBA, Selenium, Powershell for data analysis, model development, and automation.

Project Management: Proven ability to manage projects effectively, works with key stakeholders, and team members to achieve business objectives, creating a collaborative team environment, resolving conflicts, and motivating colleague.

Soft Skills and teamwork: Attention to detail, strong interpersonal skills, verbal and written communication skills with a proven ability to deliver clear insights. Over 5 years of experience in customer service and volunteering patient care.

Education

University of Toronto, St. George Campus

Honours Bachelor of Science, Dean's List Scholars

Computer Science Major, Bioinformatics and Computational Biology Specialist, and Physiology Major

Toronto, Ontario

Sep 2018 – Nov 2023

Experiences

Professional.....

TD Bank & Protiviti Canada

Bank Credit Analyst (Contract Full-time), Canada

Toronto, ON

Apr 2025 – Dec 2025 (Expected)

- Conduct data-driven investigations on high-risk transactions flagged by monitoring systems.
- Perform in-depth customer transaction reviews to identify suspicious activity, ensuring compliance with FINTRAC guidelines and policies, and prepare high-quality case summaries for regulatory filing.
- Enhance reporting efficiency by integrating **SAS** and **Oracle** based tools, reducing manual review time and resulting process improvement improving case turnaround by 15 %.
- Design improved internal data pipelines and build **automation tools** using **PowerShell** and **Excel VBA** for workflow to improve efficiency for team of 800+.

Cox System Biology Lab, University of Toronto

Data Analyst Intern, Canada

Toronto, ON

May 2023 – Aug 2023

- Engineered **automated R pipelines** to process and analyze **large-scale** genomic datasets for preeclampsia research, enhancing reporting accuracy and workflow efficiency.
- Applied **graph theory** and **network analysis** to uncover enriched biological pathways, identifying potential genetic subtypes associated with disease progression.
- Built **Cytoscape automation scripts** integrating with the STRING protein interaction database to construct and analyze large protein–protein interaction networks.
- Collaborated with interdisciplinary teams to translate research goals into data-driven insights supporting publication-quality outcomes.

Lin System Neuroscience Lab, University of Toronto

Machine Learning Data Analyst Intern, Canada

Toronto, ON

Sep 2022 – May 2023

- Designed and implemented **machine learning AI** pipelines in **Python** to analyze behavioral video data, enhancing accuracy and efficiency of pattern recognition in neuroscience experiments.
- Engineered **real-time** data processing systems to **automate behavioral tracking**, reducing manual analysis time and improving data reliability. Resulted in an improvement in data quality and a 20% faster turnaround in generating clean datasets.
- Collaborated with researchers to translate experimental objectives into computational models, enabling data-driven insights into brain activity and behavior.

Fujian Provincial Center for Disease Control and Prevention (FJCDC)

Data Analyst Intern, China

Fuzhou, Fujian

Sep 2021 – Jan 2022

- Engineered a pandemic transmission forecasting model using **Python** for model development and **SQL** for data retrieval, enabling early detection of outbreak trends and improving public health response efficiency.
- Applied advanced quantitative techniques, including Gradient Boosting and Random Forest Regression, to predict infection rates and assess intervention effectiveness.
- Developed interactive dashboards in **Power BI**, visualizing geospatial and temporal trends to support real-time decision-making by health authorities.

Projects.....

Commercial Performance Data Analysis

Ridesharing Data Insights, Relational database SQL and Python

2022

- Built and managed a relational database for a ridesharing service, enabling advanced analysis and data-driven strategy adjustments.