

Thomas Liu

437-232-2668 | t33liu@uwaterloo.ca | [LinkedIn](#) | [GitHub](#)

EDUCATION

University of Waterloo

Bachelor of Mathematics - Major in Statistics and Computational Mathematics

Waterloo, Ontario

Sep. 2022 – Present

TECHNICAL SKILLS

Languages: Python, SQL, R, C/C++, HTML/CSS, JavaScript, LaTeX, C#, MATLAB, DAX

Frameworks: Numpy, Matplotlib, Pandas, TensorFlow, PyTorch, Scikit-learn, JSON, React.js, ASP.NET,

Developer Tools: Visual Studio, Power BI, Cloudera Machine Learning, Git, Excel, Bash

Database: MySQL, Microsoft AZURE, Cloudera Operational Database, MongoDB, Salesforce

EXPERIENCE

Data Analyst

Jan. 2025 - Apr. 2025

Lifestyle Home Products

Toronto, ON

- Built dynamic dashboards by integrating **Salesforce** data with **Google Sheets** and **Google Data Studio**, providing real-time insights that improved decision-making for marketing and sales teams
- Developed and optimized APIs to connect **Salesforce** with **Zapier** and **Centah**, automating data transfers and reducing manual data entry by **80%**
- Presented analytical findings to senior management and cross-functional teams, translating complex data into actionable insights that enhanced campaign performance and customer targeting strategies

Data Analyst

May. 2024 - Aug. 2024

Ontario Lottery and Gaming Corporation

Toronto, ON

- Leveraged **Python** and libraries such as **Numpy**, **Pandas**, **Matplotlib** to perform post-campaign analysis, achieving a **20%** increase in ROI by identifying key audience and optimizing marketing strategies
- Streamlined data access and analysis for business teams by developing **Power BI** dashboards and **SQL** queries, reducing data request time by up to **90%** and allowing faster, data-driven decision-making
- Enhanced decision-making by developing automated weekly lottery and sports reports using **Python** and **Excel**, providing actionable insights into customer trends for managers and cross-functional teams
- Partnered with Advanced Analytics team to design and implement the **North Star Matrix**, improving customer targeting accuracy by minimum of **10%** got promotions and driving enhanced campaign performance

Full Stack Developer

Sep. 2023 - Dec. 2023

SparkLease Inc.

Toronto, ON

- Designed and developed the user profile feature in WeChat Mini App using **React Native**, **XML**, **CSS**, and **JavaScript**, enabling users to edit and manage their posts seamlessly, optimizeing the process speed by **50%**
- Developed responsive PC and mobile websites with **ASP.NET**, **CSHTML**, **C#**, and **JavaScript**, improving user navigation efficiency by **30%** through a dynamic filter system and streamlined account management features
- Designed and implemented robust **APIs** using **MVC** architecture, improving data handling efficiency and ensuring a consistent and optimized user experience across platforms
- Built a recommendation algorithm using **C#** and **SQL** on Microsoft Azure, increasing data retrieval speed by **30%** and increasing recommendation accuracy by **15%**, enhancing user engagement and satisfaction

PROJECTS

Stock Forecast | *Python*

Apr. 2024 - May. 2024

- Developed an **LSTM-based neural network** to predict stock price trend, achieving an accuracy of **83%** and outperforming traditional models by **15%**
- Utilized Python libraries such as **Numpy**, **Pandas**, and **TensorFlow** to preprocess and analyze historical stock data, identifying key features and trends for model training

Watopoly (Variant of Monopoly) | *C++*

Jan. 2024 - Apr. 2024

- Implemented a Monopoly variant in **C++** using **Object-Oriented Programming** principles, incorporating unique gameplay rules, dynamic player interactions, and property management for an engaging user experience
- Applied **OOP** to structure key components such as players, properties, and game board, ensuring modularity and scalability for future feature additions