Xiaoshuai (Samario) Liu

+1 437-339-1043 | samario.liu@mail.utoronto.ca | www.linkedin.com/in/sml-on-the-shore | Toronto, ON

Education

Honour Bachelor of Science, University of Toronto 2028 (Expected)

Computer Science Specialist, Data Science Specialist, Art and Science Internship Program (co-op) *Toronto, ON*

- **CGPA**: 3.84
- **Achievements**: Dean's List 2025

STA130 Introduction to Statistical Reasoning and Data Science Sep 2024 – Dec 2024

Social and Emotional Factors Affecting Mental Well-being | *Python, Jupyter, NumPy, pandas*

- Analyzed the CSCS dataset using Python (pandas, NumPy) to perform data cleaning, variable selection, and exploratory analysis of social–emotional indicators.
- Applied linear and logistic regression and hypothesis testing to quantify how emotional support and social connection influence subjective happiness scores.
- Presented results at an academic research fair, communicating complex statistical findings clearly to non-technical audiences.
- Led the 4-member team for a poster fair project, organizing weekly meetings, and tracking progress to ensure on-time completion.

CSC111 Foundations of Computer Science II Jan 2025 – Apr 2025

Content-based Game Recommender | *Python, pandas, NumPy, Scipy, streamlit, Network Analysis*

- Engineered a game-recommendation model using Python and similarity-based algorithms, applying pandas and NumPy for data manipulation.
- Optimized model performance by analyzing user–game relationships with network metrics and statistical evaluation using SciPy.
- Implemented a Streamlit dashboard for interactive visualization of the network connection between recommended game.
- Collaborated in a team environment, using Git for version control and integrating peer feedback to refine model design.
- Coordinated disagreements on the projects planning between members at beginning stage to ensure aligned goals and workflow continuity.

CSC207 Software Design Sep 2025 – Dec 2025

Stock Analysis Desktop App | *Java, Swing, Clean Architecture, Maven, JUnit, Finnhub API*

- Built a modular stock application in Java/Swing using Clean Architecture to keep UI, domain logic, and data access decoupled.
- Integrated the Finnhub REST API with OkHttp and org.json to fetch real-time market status and financial news.
- Implemented a News feature that lets users view top market news or filter company news by symbol and date; designed a Swing table UI with scrollable headlines, summaries, and clickable links/images that open in the browser.
- Wrote unit tests for the Interactor with JUnit and in-memory DAOs/presenters, achieving 95% line coverage of core use case logic.
- Collaborated in a 6-member team, using Git for version control and integrating peer feedback to improve code.

Projects

Urban Metro Review Analysis Apr 2025

| *Python, SQL, LLM API, Data Visualization*

- Designed and executed SQL queries to join, filter, and aggregate multi-table datasets (users, reviews, stations), preparing structured inputs for statistical modelling.
- Applied a Large Language Model (LLM) API to classify passenger feedback by sentiment and key service attributes.
- Visualized satisfaction patterns and sentiment trends using Matplotlib and Plotly.
- Collaborated as data processing assistant, reported progress on time.

Job Experience

Summer Camp Teaching Assistant June 2024 – Sep 2024
Vision Academy Company *Shanghai, China*

- Guided students through laboratory experiments, ensuring safety and reinforcing theoretical concepts.
- Assisted in delivering physics instruction for senior high school student preparing for Olympiad-level competitions.
- Provided daily summaries of key lessons on paper to consolidate learning outcomes.
- Helped students manage stress and stay motivated when facing challenging material, fostering a positive and supportive learning environment.

Technical Skills

Languages: Python, SQL (Postgres), R
Tools: Git, Google Cloud Platform, VS Code, PyCharm, Jupyter
Libraries: pandas, NumPy, SciPy, Matplotlib, Plotly