

Julia Tan

Toronto, ON | (647) 772-5040 | julia.mh.tan@gmail.com | [GitHub](#)

Education

University of Toronto | *B.Sc., Actuarial Science, Economics*

Sep 2024 - Present

Professional Experience

Riipen Labs | *Technical/Operations Lead*

Mar 2026 - Apr 2026

- Conducted a SWOT analysis with company data to pinpoint growth areas for 2nd Nature Safety, increasing customer acquisition by 20%.
- Arranged a meticulous agenda to ensure team members complete tasks, demonstrating leadership and increasing efficiency by 15%.
- Assessed the feasibility of insights, leading to a plan to implement a referral program and redesign the website.

AlgoVerse | *Artificial Intelligence Researcher*

Jun 2025 - Jan 2026

- Designed PyTorch experiments to assess the AUROC across 4 major open-weight models, concluding that evaluation awareness scales with size.
- Communicated effectively with a supportive research team biweekly to manage challenges and ensure the research process runs efficiently.
- Co-authored a research paper on evaluation awareness in open-weight models, achieving acceptance into ResponsibleFM'25 NeurIPS.

Projects

Long-Term Financial Stability Prediction <https://github.com/juliaaaa-t/SDSS-Datathon-2026>

Feb 2026 - Mar 2026

Students in Data Science and Statistics

- Created a hybrid stacked model with Scikit-learn and XGBoost to predict 3 factors of long-term financial stability.
- Constructed 6 Matplotlib visualizations for each factor to identify patterns, and detect outliers, strengthening the model.
- Presented actionable insights to stakeholders for strategies to improve financial stability, specifically lowering debt.

Mind the Gap: Predicting TTC Subway Delays with a Machine Learning Approach

Feb 2025 - Feb 2025

<https://github.com/juliaaaa-t/SDSS-Datathon-2025-Project>

Students in Data Science and Statistics

- Developed predictive analyses by building a TensorFlow neural network in Python to forecast TTC subway delays, achieving an MSE of 1.1.
- Created Matplotlib visualizations to reveal delay patterns, recommending prioritization of transfer station congestion mitigation.
- Presented 3 actionable recommendations to several stakeholders on strategies to improve handling TTC delays.

Financial Modelling Case Competition

Jan 2025 - Jan 2025

Quantitative Finance Club

- Developed a stock price prediction linear regression model with Scikit-learn to derive 6 trading and hedging strategies.
- Visualized the LSTM, ARIMA, and linear regression predictions against the actual prices with Matplotlib, with linear regression having the closest predictions.
- Ranked top 5 out of several teams for effective hedging strategies and predictions.

Leadership & Involvement

Quant, Artificial Intelligence, and Finance Society | *Finance Associate*

Nov 2024 - Present

- Developed comprehensive funding strategies, reaching out to 15+ sources to support and ensure financial readiness for upcoming events.
- Analyzed projected budget requirements to create detailed financial plans, improving forecast accuracy for future events by 10%.
- Negotiated with other teams to meet financial needs and oversee the budget, increasing plan comprehensiveness by 20%.

University of Toronto | *Registered Study Group Assistant Leader*

Sep 2025 - Dec 2025

- Prepared learning resources that cover concepts in the statistics course STA237, increasing problem-solving skills by 20%.
- Facilitated review sessions by debriefing on the logistics to ensure it progresses effectively, leading to an increase in productivity by 10%.
- Partnered with the leader to develop effective learning strategies, fostering a stronger learning environment by 30%.

Skills

- **Programming Languages:** Python, R, SQL
- **Machine Learning Frameworks:** Scikit-learn, TensorFlow, PyTorch
- **AI & Deep Learning:** Machine Learning, Deep Learning, Large Language Models, Generative AI
- **Data Analysis & Modeling:** Statistical Analysis, Data Modeling, Data Visualization