

Jingchao (Tony) Zhu

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SUMMARY OF QUALIFICATION

- Results-driven data analytics professional with proven experience in financial services and risk management.
- Advanced proficiency in R, Python and SQL gained through 10 more academic course projects and assignments, proven by certificate on LinkedIn.
- Skilled in developing predictive models, conducting risk assessments, and translating complex data insights into actionable business strategies.
- Proficient skills (working level) in Microsoft Office applications in Excel, Words and PowerPoints; and Bloomberg skills proven by certificate on LinkedIn.
- Demonstrated ability to work effectively in cross-functional teams while delivering data-driven solutions that enhance operational efficiency and support strategic decision-making in fast-paced financial environments.

EDUCATION

MS in Biostatistics **New Haven, Connecticut**
Yale University 2025 - 2027

Honours Bachelor of Science with High Distinction, Quantitative Finance Stream (GPA: 3.92) **Toronto, Ontario**
University of Toronto Scarborough 2020 - 2025

- **Awards:** Dean's List (2020 - 2025), 2023 Fall U OF T SCHOLAR-IN-CRS PRIESTLEY Scholarship
- **Coursework:** Multivariate Analysis [STAD37], Time Series Analysis [STAD57], Statistics and Finance II [STAD70], Probability and Stochastic Processes [STAC62], [Advanced Machine Learning and Data Mining \[STAD68\]](#).
- **Technical Skills:** Python (Pandas, NumPy, Scikit-learn), SQL, R, FRM PART I passed with "1111"
- **Visualization & Reporting:** Power BI, Excel (VBA, pivot tables, advanced formulas), time series forecasting, hypothesis testing, Monte Carlo simulations

WORK EXPERIENCE

Teaching Assistant **Toronto, Ontario**
University of Toronto Scarborough Jan 2023-Apr 2025

- Led weekly tutorials for 35 students, held weekly Office Hour, breaking down complex concepts commonly known as detail proof, equations and statistical analysis.
- Graded assignments, quizzes, and exams, providing actionable feedback and supporting students in office hours to enhance problem-solving skills.
- Taught Courses: [STAC33] Introduction to Applied Statistics, [STAB22] Statistics I, [ACTB40] Fundamentals of Investment & Credit, [STAB41] Financial Derivatives, [STAC51] Categorical Data Analysis, [STAB52] Introduction to Probability, [STAB57] An Introduction to Statistics.

Statistical Consulting Assistant **Toronto, Ontario**
University of Toronto Scarborough May 2024-Sep 2024

- Assisting U of T researchers with their statistical analysis, providing guidance and support to faculty and students in designing studies, analysing data, and interpreting results.
- Collaborating with clients to develop and implement statistical models to answer research questions or solve specific problems, and assisting clients in presenting their results effectively, both orally and through written reports.

Finance Analyst Intern **Toronto, Ontario**
Softchoice Corp. Sep 2023-Apr 2024

- Track, review and investigate daily cash receipts from MDF vendors by using SAP and ensure accurate application to outstanding receivables.
- Assist the Financial Reporting group with month-end and quarter-end reporting responsibilities.
- Developed automated reporting systems using Python and Excel VBA, reducing report generation time by 75%.

Risk Policy and Analysis Intern **Toronto, Ontario**
Ontario Financial Authority Jan-Apr 2023

- Developed and implemented machine learning models using Python and R to forecast market trends and credit risk indicators, resulting in a 15% improvement in forecast accuracy compared to legacy statistical methods.
- Applied and refined analytical and programing skills in a middle office, and generated daily, weekly, and monthly risk management reports.

- Created comprehensive data visualization dashboards and presented analytical insights to senior management, successfully translating complex statistical findings into clear business recommendations that influenced strategic planning decisions.

PROJECTS

Team Leader - Portfolio Trading Strategy for Volatile Year Project

Toronto, Ontario

University of Toronto Scarborough

Jan-Apr 2025

- Designed and implemented a dynamic trading strategy using Modern Portfolio Theory with monthly rolling-window optimization on historical daily returns.
- Constructed a diversified portfolio of ETFs, equities, gold, long- and short-term bonds to maximize risk-adjusted returns under volatile market conditions.
- Back tested the model against the S&P 500 benchmark, demonstrating superior performance and lower downside risk during high-volatility periods.

Team Leader - Sense Analysis on Rat detecting Landmine Project

Toronto, Ontario

University of Toronto Scarborough

Jan-May 2024

- Designed and implemented a comprehensive regression model incorporating interaction terms and quadratic transformations to capture non-linear relationship.
- Conducted extensive data preprocessing including outlier detection, feature engineering, and log transformations to ensure model robustness and statistical validity.
- Applied cross-validation techniques and performed rigorous back testing to validate model performance, achieving strong generalization capabilities- Utilized advanced statistical methods including heteroscedasticity testing and residual analysis to ensure model assumptions were met.

Team Member - Survival Analysis Project

Toronto, Ontario

University of Toronto Scarborough

May-Sep 2023

- Learn textbook-based material and have reading courses with professors and four students.
- Generate Survival Analysis Report based on the given Cancer Patients Data and do the logical prediction of the survival.

EXTRACURRICULAR

Consultant & Data Analytics

Toronto, Ontario

UTSC Management Consultant Group

Sep 2022-Jan 2023

- Providing data-driven strategies to aid in the consulting projects through technology transformation for the whole Management Consulting Group.
- Demonstrated a high standard of communication skills and experience working within teams.

Event Associate

Toronto, Ontario

UTSC Green Path Association

Aug 2020-May 2021

- Led and managed the 2 project teams by creating an organized and communicated atmosphere among 4 groupmates.
- Actively organized the project meetings and made contributions to the success of the 2 projects through communication and planning.

RWE Program Training

Toronto, Ontario

University of Toronto Scarborough

Aug 2020-May 2021

- Improved academic writing grades from B- average to A- average by constantly participating in Journal Writing from August 2020.
- Practiced communication skills and collaboration learned from my three tutors throughout my 2 RWE experience.