ZHIHAN ZHOU

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EDUCATION

University of Toronto   **Bachelor of Commerce (Rotman)**   **September 2017 – May 2021 (Expected)**   **Toronto, Canada**

- **Specialist** in *Finance and Economics* & **Double Minors** in *Statistics* and *Mathematics*   <u>Cumulative GPA</u>: 3.74/4.0
- **Core Courses**: **Finance** (Capital Market, Futures and Options, Risk Management, Corporate Finance, etc.), **Economics** (Advanced Microeconomics, Advanced Macroeconomics, Econometrics, etc.), **Accounting**, **Statistics** (Probability, Data Analysis), **Calculus** (Multivariable Calculus), **Linear Algebra**, **Differential Equation** (ODE, PDE), **Computer Science**, **Machine Learning**.
- **Summary of Qualification:** solid background in finance, economics, mathematics, data analysis, machine learning, and accounting.
- **Strong Interests:** quantitative finance, risk management, capital market, financial derivatives, financial modeling, etc.

WORK EXPERIENCE

University of Toronto   **Research Assistant (Full Time)**   **July 2020 – August 2020**   **Toronto, Canada**

- Studied the Miwa method to calculate the non-centered orthant probability, which is the probability that all positive random variables have a joint multivariate normal distribution.
- Translated the program of the Miwa method from <u>R</u> and <u>C</u> codes into a <u>MATLAB</u> code and then optimized it for acceleration.
- Found the method's limitation of high bias under high dimensions and tried to overcome the limitation by selecting a different set of grid points to construct the polynomial approximation.

WeCloudData Inc.   **Sales Analyst (Part Time)**   **October 2018 – February 2019**   **Toronto, Canada**

- Analyzed thousands of questionnaires by advanced <u>Python</u> queries for customer-behavior analysis, including finding the most popular data science-related courses and teaching methodologies.
- Utilized advanced <u>SQL</u> queries to analyze historical sales data to rank data science-related courses by the profits and find the most effective marketing strategies.

Guotai Junan Securities Co., Ltd.   **Risk Control Analyst (Internship)**   **May 2018 – July 2018**   **Jiangsu, China**

- Analyzed millions of data by <u>Python</u> queries to check whether the 16 chosen companies illegally manipulate the market price such as wash trading and check whether they can fulfill their obligations or further invest.
- Utilized <u>Excel VBA</u> to analyze the data to supervise the customers short selling stocks on whether their assets can cover the risk based on the financial market's criteria.

RELEVANT PROJECTS

Machine Learning Projects   **Machine Learning course (RSM316)**   **2020 Winter Term**   **Toronto, Canada**

- Utilized <u>Python</u> to implement machine learning algorithms that trained data to forecast default risk, foreign investment risk, or portfolio performance, and compare different algorithms to find the most proper algorithm for each case.

Algorithmic Trading Projects   **Financial Trading Strategy course (RSM434)**   **2020 Fall Term**   **Toronto, Canada**

- Built three algorithmic trading programs in <u>Python</u> to fill the targeted position with matching the market VWAP, earn the bid-ask spreads with providing liquidity to the market, and make profits through price discovery and arbitrage opportunities.

EXTRA-CURRICULAR ACTIVITIES

UTChinese Network   **Sponsorship Director**   **September 2018 – September 2019**   **Toronto, Canada**

- Negotiated with sponsors to receive win-win cooperation (7,100 CAD sponsorship fees in total).
- Interviewed, trained, and managed 36 sponsorship team members.

EXCITE2018 Conference: Transportation   **EXCITE2018 PR Lead**   **October 2017 – March 2018**   **Toronto, Canada**

- Invited four CEOs and two managers from Uber Canada, VIA Rail, Transpod Hyperloop, Rose Rocket, Solar Ship, and SOM.
- Attracted <u>500</u> attendees through class announcements, social media, flyers, posters, and event booths.

AWARDS

- Regents In-Course Scholarship (Based on academic excellence)   University of Toronto   2020
- The Isabel Bader In-Course Scholarship (Based on academic excellence)   University of Toronto   2019

TECHNICAL SKILLS

Python (Pandas, NumPy, Matplotlib, Scikit-Learn, Seaborn, etc.)	• SQL	• MATLAB
R Language (data simulation, data analysis, data wrangling, data visualization)	• Excel (VBA)	• STATA