

# MASTERS OF financial insurance



MFI candidates  
2020 - 2021



Statistical Sciences  
UNIVERSITY OF TORONTO

# What our industry partners say about MFI students:

“Very impressed by the superb technical skill, creativity, and professionalism shown by the MFI student we hired for the summer internship..... The work exceeded my expectations.”

Emile Elefteriadis, Swiss Re

“It has been a great pleasure working with the MFI students. They are enthusiastic and engaged learners, which makes me feel more motivated about my teaching.”

Ling Luo, Manulife

“I have found the MFI students to be hardworking, curious and intelligent.”

Chen Muthukumaraswamy, WTW

## Contents

Message from Program Director .....	4
Outline of Program .....	5
Foundation of Program .....	6
Hiring a Work Term Student .....	6
Partners and Supporters from Industry .....	7
Ways to Get Involved .....	8
What Industry Partners Have To Say .....	9
Student Profiles .....	10
Sirui Bai .....	12
Qiandan (Tanya) Deng.....	13
Tunan (Kris) Jia .....	14
Rong (Belle) Jiang .....	15
Zhichun (Michelle) Kang .....	16
Chi Fung (Leo) Leung .....	17
Fengjiao (Betty) Li .....	18
Qianqian (Lydia) Li.....	19
Zixuan (Leo) Lin.....	20
Yangshan (Lance) Liu.....	21
Yuhui (Rika) Liu .....	22
Yuzhou Liu.....	23
Tianyu (Erin) Ma .....	24
Huasi (Iris) Ou.....	26
Shiya (Sophie) Ou.....	27
Jingyao (Joyce) Qiao .....	28
Kevin Wang .....	29
Qiwen (Wendy) Wang .....	30
Yuling (Tim) Wang .....	31
Hanzhi (Jessie) Wu .....	32
Hongda (William) Wu.....	33
Yaru Yang .....	34
Chenming (Ming) Ye.....	35
Ruolin Yuan.....	37
Yuxuan (Gina) Zhang .....	38
Sichao (Michael) Zhu .....	39
Meet our Alumni .....	40
Our 2020 MFI Award Recipients .....	42
Program Contact Information .....	50



## Message from Program Director

First off, Sarah, Shari and I wish that you are all healthy and staying safe in these very challenging times. We are all treading uncharted and murky waters with currents that pull us in a myriad of directions. Yet, society and individuals are soldiering onwards and there is no doubt that we will come out of this stronger.

The Masters of Financial Insurance (MFI) professional program was launched in September 2016 to address the growing need for skilled professionals with the unique blend of data science, mathematical finance and insurance. Staying adaptable, this year the MFI Program moved courses online, as part of the University's overall response to stop the spread of COVID-19. It has its challenges, but there are also opportunities – e.g., students can now re-watch lectures, practitioners from Europe can easily participate in our seminars, and there is even more project-based content.

Since 2016, the MFI program has developed and grown rapidly and demand from students and employers has been beyond expectations – now in our fifth year we have grown to 26 students (over 60% women) and boast many partnerships ranging over all areas of finance, fintech, insurance, pensions, and consulting. Partner firms not only employ our highly qualified candidates, but industry professionals also co-teach courses, develop curriculum, deliver seminars, and visit the Program to speak about their particular field of expertise. This exposure and connection to industry provides our students with unique learning opportunities and key insider knowledge.

The response we receive from industry partners on the quality of the students and their training is second to none, and we are confident that our alumni will become leaders in the field and make important contributions here, in Canada, and beyond.

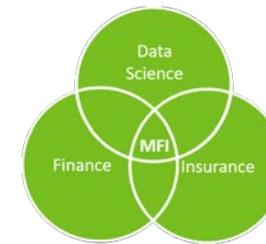
We are confident that if you offer a summer (or longer) opportunity to an MFI candidate from the Class of 2021, you will be impressed with their intellect, professionalism, and knowledge.



Professor and Director of the MFI Program  
Sebastian Jaimungal

## Outline of Program

The Department of Statistical Sciences offers the Master of Financial Insurance Program (MFI), a full-time professional program focused on producing students who will become leaders in the global finance, fintech, and insurance industry. The program stands on three pillars: data science, financial mathematics, and insurance modeling. It provides students with education at the interface of these



domains with sufficient depth and breadth so that students can provide both detailed analysis of finance and insurance risks, as well as provide a bird's-eye perspective on how the embedded risks affect the firm enterprise wide.

The program is particularly appropriate for students with backgrounds in statistics, actuarial science, economics, and mathematics, or students with a quantitative background (such as those in physics and engineering). While students have different backgrounds coming into the program, they are trained together as one cohort. In the first semester, students are exposed to core theory and methodology, in addition to numerous industrial seminars. While in the second semester, they work on a variety of case studies and projects led by industry professionals.

The MFI Program runs for 12 months, from September to August. Students take academic courses in the first two semesters with the program culminating in a 16 week work-term placement designed to provide real-world experience in finance and/or insurance. As an added bonus students are ready to start full time work or extend their contracts into September!

### FIRST SEMESTER

Applied Probability for Mathematical Finance  
Applied Time-Series Analysis  
Life Insurance Mathematics  
Data Science for Risk Modeling  
Industrial Seminar Series (Part 1)

### SECOND SEMESTER

Financial Risk Management  
Finance and Insurance Case Studies  
Numerical Methods for Finance & Insurance  
Data Science in Practice  
*One Elective Course in a Related Topic*  
Industrial Seminar Series (Part 2)

SEPTEMBER  
TO  
DECEMBER

JANUARY  
TO  
APRIL

MAY  
TO  
AUGUST

FROM SEPTEMBER  
AVAILABLE FOR FULL  
TIME WORK!

## Foundation of Program

Traditionally, the finance and insurance worlds are quite distinct, but this distinction is disappearing. Financial firms are taking exposure to insurance risks, insurance companies are providing guarantees to their clients that fundamentally intertwines them with the financial markets, and pension plans provide income guarantees which profoundly link their obligations to the these markets. The Masters of Financial Insurance (MFI) program answers the growing need from industry to fulfil this unique skill set.

The MFI is a professional program that provides candidates with a sophisticated understanding of this complex interaction of the financial and insurance fields. The program contains a comprehensive set of offerings and students gain rigorous training in data science, actuarial science and finance. Graduates from this program are versatile and well armed to face the highly skilled work required of them in the banking, insurance, pension, fintech, and consulting industries.

## Hiring a Work Term Student



You can test drive new “pre-professionals” through a cost effective, risk free environment and also shape the training of future professionals by offering feedback to the program. Bringing an MFI graduate student on board for a work placement either for the summer term or in an extended contract – as the students are available for full time, or longer term contract employment immediately after the summer – is an excellent way to connect with emerging high achieving professionals, and bring new thinking and strategy to your organization.

The students presented in this resume book will be well-prepared to bring their competencies, knowledge and expertise to your organization in May 2021.

## Partners and Supporters from Industry

We are immensely grateful for the interest shown by our industry partners in supporting the next generation of industry professionals and our partners are continually growing.

- Aon
- Aon Pathwise™
- AxiomSL
- Bank of Montreal
- Berkshire Hathaway Group Reinsurance
- Canada Life
- Canada Mortgage & Housing Association
- Coinsquare
- CI Investments
- CIBC
- CPPIB
- d1g1t
- Forester’s Financial
- Great-West Life
- Hannover Reinsurance
- High Street Asset Management
- IBM
- Manulife
- Moody’s Analytics
- Munich Reinsurance
- Oanda
- Ontario Ministry of Finance
- Ontario Teachers’ Pension Plan
- OPSEU Pension Trust (OPTrust)
- Proviti
- Polar Asset Management
- Royal Bank of Canada
- RBC Insurance
- RSA
- Scotiabank



- Sun Life Financial
- Swiss Reinsurance
- TD
- TMX
- Wawanesa
- Willis Towers Watson

## Ways to Get Involved

The MFI Team has been impressed by the enthusiasm and support given by industry partners. You can be involved not only by providing summer work terms for our candidates but also in other ways:

- **Attending our annual fall reception**
- **Delivering a guest lecture to our students**
- **Hosting a company tour or information session**
- **Sponsoring MFI events such as the MFI Fall Reception or Alumni Socials**
- **Mentoring a student**
- **Providing an informational interview**
- **Offering mock interviews and feedback**
- **Hosting an on-campus information session**
- **Hiring a recent graduate**
- **Participating on an advisory board**

## What Industry Partners Have To Say

“Thank you, team MFI at the University of Toronto, for creating an amazing program with bright, well rounded, hard-working students with amazing knowledge and technical skills, ready to contribute in today’s data driven world. Your program is directed by a group of amazing people (Shari and Sarah) who are a true pleasure to deal with and make it simple to communicate.

Our MFI intern (Jiayan Yang) was ready to contribute from day one. In her role, Jiayan was involved in creating multiple strategic predictive models and heavily engaged in automating a reporting package. She has quickly gained knowledge of all software programs necessary to perform her job and on top of that created learning sessions for other analysts and managers at the Bank to provide basics of Python software package as well as new analytical methodologies and techniques.

Jiayan is a pleasure to work with. She is a quick learner, very focused on task at hand and delivers results very quickly. Her technical skills are exactly what today’s analytical world requires. Jiayan surely exceeds my expectation and that’s why she was offered a second work term with our organization. Thank you Jiayan and team MFI!”

-- BMO

“The MFI program exceeded my expectations in terms of connecting us with a candidate whose capability added value both in the near term and potential long term. The MFI candidate was a great fit for the team, interacting seamlessly with our current staff and proactively seeking out networking opportunities. Our MFI candidate’s excellent level of engagement, general curiosity and ability to tackle a steep learning curve is what set her apart from other candidates we interviewed and internships experienced in the past.”

-- RBC

“Very impressed by the superb technical skill, creativity, and professionalism shown by the MFI student we hired for the summer internship....We had a complex model building project that required not only some sophisticated modeling and an intuitive interface, but required navigating ambiguity and good cross functional teamwork. The work exceeded my expectations. There was of course even more we threw at the MFI student, who handled it all with enthusiasm and a smile on his face.”

-- Swiss Reinsurance

# Student Profiles



Sirui Bai



Zhichun (Michelle) Kang



Zixuan (Leo) Lin



Yangshan (Lance) Liu



Huasi (Iris) Ou



Jingyao (Joyce) Qiao



Yuling (Tim) Wang



Chenming Ye



Qiandan (Tanya) Deng



Chi Fung (Leo) Leung



Yuzhou Liu



Tianyu (Erin) Ma



Shiya (Sophie) Ou



Qiwen (Wendy) Wang



Hongda (William) Wu



Ruolin Yuan



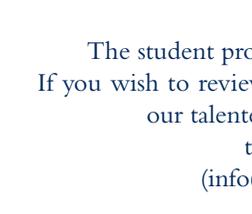
Tunan (Kris) Jia



Fengjiao (Betty) Li



Yuhui (Rika) Liu



Kevin Wang



Hanzhi (Jessie) Wu



Yuxuan (Gina) Zhang



Rong (Belle) Jiang



Qianqian (Lydia) Li



Yaru Yang



Sichao (Michael) Zhu

The student profiles featured are an overview.  
If you wish to review the complete resumes of any of  
our talented cohort please contact  
the MFI Office  
([info@mfi.utoronto.ca](mailto:info@mfi.utoronto.ca)).

## Sirui Bai

Sirui is an accomplished and highly self-motivated, analytical professional with strong quantitative research and statistical analysis skills combined with exceptional academic and projects. She has excellent communication skills and a proven ability to juggle multiple high priority tasks.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BMath (Honours)  
Actuarial Science & Statistics  
University of Waterloo  
2020  
President's Scholarship: 2017

### EXPERIENCE

**Project: Exploratory Data Analysis of Titanic Dataset** September 2020  
Analyzing & Processing Data in Python

- Imported pandas, seaborn, matplotlib & sklearn to process and visualize the relationships between the survival rates and 11 features; with data obtained from Kaggle
- Trained different machine learning models, & Random Forest was selected as the best performance on prediction of the survival & measurement of the feature importance.
- Used K-Fold Cross Validation for parameters
- Computed precision and recall by F-score, & plotted them by ROC AUC curve; obtained a ROC AUC score of 94.5%

**Project: Prediction of COVID19 Pandemic Data** April 2020

- Applications of ARIMA and Regression Models
- Demonstrated solid data analysis skills through extracting the real number of infected people per day in Canada & fitted into the different regression & ARIMA models, to optimize the next step analysis.
- Evaluated the prediction performance of those models using the PRESS statistic and test data
- Predicted the total number of infected people in Canada for next 100 days using the superior models, results showing a dramatic increase.

Grace and Healthy Dumplings, Waterloo June 2017-  
Store Manager April 2019

- Showed excellent project management & leadership skills by assigning tasks to individuals & scheduling of employees
- Demonstrated outstanding communication and interpersonal skills by delivering quality service

### SKILLS

Programming: R; Python; SAS; SQL; MS Excel; Basic HTML

### PROFESSIONAL CERTIFICATES/AWARDS

Society of Actuaries  
FM (Financial Mathematics)

### INTERESTS/ACTIVITIES

Hult Prize Challenge 2018: Participant

## Qiandan (Tanya) Deng

Tanya has a comprehensive understanding of financial and statistical modeling, and risk management. She possesses strong quantitative, analytical, and problem-solving skills and is a detailed-oriented, self-motivated person with strong verbal and written communication skills. A dedicated team player with superior time-management skills, Tanya has a proven ability to multi-task.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (High Distinction)  
Mathematical Applications  
in Economics & Finance (Specialist)  
University of Toronto  
2020  
New College In-Course Scholarship  
Dean's List Scholar

### EXPERIENCE

Beam Data, Toronto May 2020-  
Data Science Consultant August 2020

**Project: Recommendation System for Sponsor Circle Inc.**

- Collaborated effectively to build a recommendation system using machine learning techniques which potentially increased the company's efficiency by 30%
- Developed a project plan that guided the team
- Proposed core ideas of the model through independent research
- Implemented algorithm using Python achieved 86% precision score
- Utilized web-scraping to collect 400+ articles
- Presented and discussed results with clients

**Project: Sales Analytics for Thurso Surf**

- Performed data cleansing on 10000+ rows of historical sales and inventory data. Conducted detailed analysis, generated visualizations using Python, & derived actionable insights
- Automated and templated visualizations to reduce the data processing time by 70% for future analysis
- Prepared reports that interpret customer behavior. Helped the clients take proactive business decisions

**Project: Loan Default Prediction Modeling** June 2019

- Loaded 8 raw datasets into MYSQL database; joined and cleaned 1 million rows of data; prevented data leakage
- Imported tables into Pandas DataFrame and performed feature engineering; Trained Logistic Regression, Random Forest, and Gradient Boosting models; Performed cross-validation
- Tuned hyperparameters using GridSearch; achieved a precision score of 88%
- Gained hands-on experience in predictive modeling; prepared slides to present to students and instructors

### SKILLS

Programming: MS Excel; Tableau; R; Python; SQL; SAS; MATLAB

### PROFESSIONAL CERTIFICATES/AWARDS

CFA Level 1: Pass  
FRM Level 1 Candidate

### INTERESTS/ACTIVITIES

U of T Table Tennis Team  
2017 - 2019

## Tunan (Kris) Jia

Kris is a high energy, results-oriented self-starter with the ability to achieve under tight deadlines. She has the ability to communicate clearly and concisely with both technical and non-technical audiences. Kris has intellectual curiosity and a fundamental knowledge of the financial market, Machine Learning, and insurance products.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours)  
Actuarial Science & Mathematics;  
University of Toronto  
2020

### SKILLS

Programming: Python; R; SQL; Tableau;  
MS Excel (VBA); AXIS

### PROFESSIONAL CERTIFICATES/AWARDS

**Society of Actuaries**  
P (Probability);  
FM (Financial Mathematics);  
IFM (Investment & Financial Markets); SRM  
(Statistics for Risk Modeling);  
STAM (Short Term Actuarial Mathematics);

FSA Candidate  
IBM Data Science: Coursera

### INTERESTS/ACTIVITIES

Painting Tutor & Works Exhibition:  
Organizer

### EXPERIENCE

Huatai Life Insurance Group, Beijing, China  
Actuarial Pricing Intern

May 2019-  
August 2019

- Collected sales record from 2008 to 2018 & per-capital income released by National Statistic Agency, cleaned the data in Excel & collaborated with internal teams to develop advanced analysis & modeling methods to drive deeper insights
  - Analyzed the price trends from multiple perspective of regions, time, and business lines to quantify the impact of policyholders' wealth level on product pricing
  - Delivered multiple presentations with comprehensive results & graphs to the team to identify revenue opportunities based on information gathered from current trends, competition & strategy
  - Refined a TL pricing model to value the performance of the product, enhanced the results demonstration & automated the GP calculation by using VBA to reduce manual work and improve accuracy
  - Tested the APE & NBM with the inputs of mortality, lapse & expense of a CI product upon pricing & reserving basis using VBA, documented the results in an appropriate format to prepare for IA report
  - Collaborated with the financial team to reconcile quarterly premium processes using SQL and Excel
- Projects
- Data Analyst Learning: XiaoZao
  - Credit Risk Modeling: Risk Lab Case Competition
  - P&C Reserving: University of Toronto

## Rong (Belle) Jiang

Rong has a comprehensive understanding in the option investment industry, and experienced in quantitative analysis and financial modeling. Being a fast learner and adaptable to new environments, she has strong tact, diplomacy and presentation skills acquired from work experience.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours) with High Distinction  
Mathematical Application  
in Finance & Economics  
University of Toronto  
2020

Dean's List Scholar: 2017; 2019

### SKILLS

Programming: MySQL; Python; STATA;  
LaTeX; R  
Wind (Chinese Bloomberg)

### PROFESSIONAL CERTIFICATES/AWARDS

CFA Level I Candidate

### INTERESTS/ACTIVITIES

Piano; Guitar; Traveling; Hiking; Cooking;  
KPop

### EXPERIENCE

University of Toronto  
Teaching Assistant

September 2020-  
Present

- Responsible for quizzes and exam grading, provide the professor with feedback related to student performance
- Deliver virtual tutorials and office hours with students

Shanghai KingRally Portfolio Management Co., China  
Internship, Investment Department

July 2019-  
September 2019

- Organized all statistics of 50ETF options (more than a trillion), store them in database developed by MySQL.
- Used MySQL database & Wind to write programs in Python which analyze options' implied volatility, Greeks, & other statistics, which assisted decisions on trading strategies
- Wrote programs in R and Python to fit GARCH model, tested with SSE50 index & CSI300 index; made prediction on future volatility

BP Sinopec Zhejiang Petroleum Company, Ltd, China  
Internship, GM Assistant

December 2016-  
January 2017

- Interpreted & analysed sales of non-oil goods in gas stations province using Excel and other Microsoft tools; made predictions & provided advice on inventory for the following year
- Provided assistance on customer satisfaction survey project including data collection and data analysis
- Wrote articles which were published on official social media, content of articles included sales promotion, gas station safety promotion event, & general station updates

## Zhichun (Michelle) Kang

Michelle has insurance industry experience in both Life & Health pricing & valuation groups, with proven practice in pricing modeling & actuarial valuation. She possesses problem-solving skills, with a positive and dedicated attitude. She is an excellent team player, with effective interpersonal skills & rich leadership experience.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2019 - 2020

BSc (Honours)  
Actuarial Science & Statistics  
University of Toronto  
2020

Dean's List: 2016 - 2019

### EXPERIENCE

EY, Beijing August 2020- Present

- Actuarial Intern, Actuarial Life Consulting
- Processed census data, assisted in preparing complex actuarial valuations & related financial disclosures
- Took an active engagement in initiating a modelling project for reconciling cash flows in GGY AXIS model
- Prepared & assisted with client presentations

Munich Re, Hong Kong January 2020- June 2020

- Actuarial Intern, Life & Health Pricing
- Initialized a facultative group health quotation model, & applied to premium rate adjustments for all client cases
- Assisted on data analysis for the ASHK Mortality Experience Study Report
- Built a new procedure for creating checking templates for reconciling client's statement of account and preparing for annual audit: remapping Reinsurance Sum at Risk, Reinsurance Premium, Commission, Profit-Commission, and Claim

Partner Re, Toronto May 2019- September 2019

- Actuarial Intern, U.S. Life Valuation
- Assisted in preparation of quarterly statistical valuation for U.S. line of business in production model
- Transferred current Axis valuation model to the 'Rules table' framework making the model manageable
- Initialized an Access model to analyze influential risk categories for 150,000+ base tables at one time and took an initiative to build a VBA model to automatically generate over 700 'Rules Tables' scripts

### SKILLS

Programming: R; STATA; VBA; SQL; MS Excel; GGY AXIS

### PROFESSIONAL CERTIFICATES/AWARDS

**Society of Actuaries**  
P (Probability); FM (Financial Mathematics); IFM (Investment & Financial Markets)

### INTERESTS/ACTIVITIES

U of T Actuarial Science Club:  
Marketing Director  
Yoga & Meditation

## Chi Fung (Leo) Leung

Leo is an ASA with overseas actuarial exposure in various actuarial functions, including Pricing, Valuation and Economic Capital. He has demonstrated excellent communication, critical thinking, problem solving, and interpersonal skills through education and work experience. Leo also has experience in Solvency II, IFRS reporting and ALM.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc Actuarial Science  
University of Hong Kong  
2017

HKU Foundation Scholarship for Outstanding Students  
2012

### EXPERIENCE

Hang Seng Insurance, Hong Kong April 2018- August 2020

- Management Trainee, Actuarial
- Monitored lapse rate of annuity products
- Assessed profitability of term products
- Refined on policyholder's illustrations based on GL16 requirements
- Conducted asset-liability matching and reallocated assets to back liabilities of existing in-force policy blocks
- Reviewed economic assumptions and brought +USD 50M profit before tax impact to the company
- Assisted HKRBC QIS3.0 submission

CXA Group Ltd., Hong Kong July 2017- January 2018

- Benefits Analyst
- Analyzed employee benefit structure of top tier retail stores of over 1000 employees across APAC region
- Analyzed claims experience for top tier luxury brands & IT firms

RGA Insurance, Hong Kong January 2015- June 2015

- Actuarial Intern (Pricing Team)
- Handled group clients' enquiries and facultative quotation pricing
- Assisted in experience studies and medical review
- Contributed to enhancement in pricing assumptions using AXIS

Manulife Financial Asia Ltd., Hong Kong August 2014- December 2014

- Actuarial Intern
- Assisted in New Business Planning for the region
- Built VBA model to analyze business data from The Philippines within tight deadline
- Assisted in preparation of quarterly risk report of the region

### SKILLS

Programming: VBA; SQL; AXIS; familiar with SAS; Python

### PROFESSIONAL CERTIFICATES/AWARDS

**Society of Actuaries**  
Associate: 2018

### INTERESTS/ACTIVITIES

Chairman – Science Society, HKUSU

## Fengjiao (Betty) Li

Betty possesses a solid knowledge in finance, actuarial science, and statistics through academic study. She displays exceptional problem-solving and multi-tasking skills demonstrated through academic and work experience. Self-motivated with strong desire to learn and contribute in team settings, Betty also has multicultural experience and communication skills gained from volunteer and exchange study.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BMath (Honours)  
Actuarial Science & Statistics  
University of Waterloo  
2019

International Experience Award 2018

Education Abroad (Exchange)  
University of Hong Kong  
September - December 2018

### SKILLS

Programming: VBA; R; SAS; Scheme  
(Racket); Python; C

### PROFESSIONAL

#### CERTIFICATES/AWARDS

**Society of Actuaries**

P (Probability);

FM (Financial Mathematics);

LTAM (Long Term Actuarial

Mathematics);

SRM (Statistics for Risk Modeling);

STAM (Short Term Actuarial Mathematics)

SAS Certification: Base & Advanced  
Programming for SAS 9

### INTERESTS/ACTIVITIES

UWaterloo Open House:  
Campus Representative

### EXPERIENCE

Dinghe Property Insurance Co., Ltd., China  
Actuarial Assistant  
October 2019-  
June 2020

- Extracted and cleaned data; conducted K-means/DBSCAN clustering analysis for risk classification on large amount of customer data
- Analyzed risk factors and conducted risk selection by applying statistical and predictive models (GLM)
- Assisted in adjusting claim amounts to evaluate IBNR reserves for claims
- Summarized and updated new insurance regulations for the Marketing Department to develop new products

Bank of China (Laiyang), China  
Summer Intern, Risk Management  
Summer 2018

- Conducted risk evaluation of co-operative companies; assisted in conducting decision tree algorithm to classify risk factors
- Responsible for collecting essential market and target corporations' information to assist supervisors in risk evaluation

City of Toronto, Toronto city Cultural Event (TCCE)  
Volunteer  
2014 -  
Ongoing

- Participated in multiple city-wide cultural events (Doors Open Event, Canadian Aboriginal Day, etc.)

## Qianqian (Lydia) Li

Lydia possesses strong time management, critical thinking, and excellent interpersonal skills demonstrated from rich internship experiences. She is passionate in pursuing a career in the financial and insurance industry with a strong curiosity for learning new skills.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc Honours  
Actuarial Science & Statistics  
University of Toronto  
2020

Basic Reserving Methods for P&C  
Insurance; Insurance Products &  
Regulation with AXIS

Dean's List: 2017/18/19/20

U of T New College In-Course  
Scholarship

### SKILLS

Programming: Python; R; VBA  
MOODY'S AXIS

### PROFESSIONAL

#### CERTIFICATES/AWARDS

**Society of Actuaries**

P (Probability);

FM (Financial Mathematics);

STAM (Short Term Actuarial

Mathematics);

IFM (Investment & Financial Markets)

### INTERESTS/ACTIVITIES

Painting & Sketching; Travelling;  
Baking; Jogging

### EXPERIENCE

Healthcare of Ontario Pension Plan (HOOPP), Toronto  
Actuarial Student, Plan Operation, Division of Actuarial  
Service  
May 2020-  
Present &

- Collaborated with calculation specialists using ArielDB including transfer-in, termination and retirement calculations for over 3700 members

- Assisted in investigating the defects actuarial tools to ensure the pension process was accurate
- Developed multiple pension/termination test-cases to ensure actuarial concepts are employed in member services

- Developed data management skills from reviewing and organizing relevant data, interpreting and visualizing the data to investigate any potential issues on pension plan development

- Assisted in preparing presentation materials about updates for the pension plan; demonstrated excellent verbal and written communication skills and interpersonal skills through working closely across departments

Investors Group Financial Services Inc., Mississauga  
Financial Advisor Assistant  
Apr 2017-  
June 2017

- Obtained substantial data analytical skills from collecting, sorting & analyzing data from clients' portfolios & interviews to providing suggestions on insurance product development
- Gained insights of the insurance industry and products by conducting research, including reviewing industry reports, extracting relevant data from multiple resources, and analyzing data to assist in developing financial proposals

## Zixuan (Leo) Lin

Leo has seven months actuarial analysis experience in life/health insurance, including experience studies and product research. He also has experience of predictive analysis using R, generalized linear models, decision trees, and data visualization.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BBA  
Actuarial Science & Statistics  
Temple University  
2018

Gamma Iota Sigma Professional Risk  
Management:  
Insurance and Actuarial Science  
Fraternity - Membership with  
Academic Distinction  
Dean's List, Fox School of Business

### SKILLS

Programming: SQL; R; Python; MS Excel

### PROFESSIONAL CERTIFICATES/AWARDS

**Society of Actuaries**  
P (Probability); FM (Financial  
Mathematics); MFE (Models for  
Financial Economics); LTAM (Long Term  
Actuarial Mathematics); SRM (Statistics  
for Risk Modeling); STAM (Short Term  
Actuarial Mathematics); all VEE credits

### INTERESTS/ACTIVITIES

Temple University: Fox Peer Teacher

### EXPERIENCE

Hannover Re, Shanghai, China  
P&C Actuarial Intern  
May 2020-  
August 2020

- Built pricing models for short term health insurance based on historical data, fitting frequency & severity models and validating different distribution assumptions
- Analyzed incidence & lapse rate between illnesses by processing 5,000,000+ records of treaties & amendments in SQL
- Researched incidence rates, medical expenses therapies on Alzheimer Disease & Hypertension Complications, supporting senior actuaries for pricing quotes and innovation in health insurance

Munich Re, Beijing, China  
Financial Actuarial Intern  
March 2019-  
July 2019

- Collaborated with teammates & manager to standardize clients' treaties using SQL & Excel & maintained product database
- Computed loss ratio & Actual/Expected ratio & applied Chain Ladder Method to update IBNR, optimizing product profitability
- Prepared treaty summary for China mainland market, checked treaty details to reduce significant accounting error

Versailles Group Ltd., Chicago, U.S.  
Mergers & Acquisition Intern  
May 2018-  
June 2018

- Modified offering memorandum for 5 companies; performed company research & financial statement analysis, forecasting and financial modeling (discounted cash flow) to examine company's market value
- Attracted 300+ potential buyers through social media and achieved a 25% response rate
- Attended conference calls and met with clients, negotiated with buyers under senior manager

## Yangshan (Lance) Liu

Lance possesses outstanding communication, critical thinking, analytical, and leadership skills honed through communication with government, security firms, audit firms, and law firms, and also through organizing large events. He has a strong interest and academic background to further his career in data science.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours)  
Mathematics Application in  
Economics & Finance Specialist  
University of Toronto  
2020

### SKILLS

Programming: VBA; Python; SQL; R;  
Tableau

### PROFESSIONAL CERTIFICATES/AWARDS

CFA Level 1  
2019  
SAS Base & Advanced Certificate  
IBM Data Science Professional  
Certificate: Coursera

CICC international student investment  
case competition: First Place 2019  
Chinese Debate Championship 2017

### INTERESTS/ACTIVITIES

Swimming (national athlete);  
Board Games

### EXPERIENCE

Sinolink Securities, Beijing, China  
Investment Bank Department Intern  
June 2020-  
August 2020

- Participated in the Jiheng Pharmaceutical Co. Ltd IPO Project
- Demonstrated strong interpersonal skills by coordinating with representatives, audit firm & law firm to ensure smooth project completion
- Exhibited strong analytical skills by conducting thorough statistical research on over 5000 data points with Excel & constructing Excel models to assist with data storage
- Assisted in industrial research, developed model in Excel to reveal significant industry trends, & abstracted qualitative implications; demonstrated excellent proficiency of data processing tools
- Summarized results into the final proposal about safety management improvement, presented to the manager, resulting in the construction department adopting the proposal in two other projects

Roland Berger, Shanghai, China  
Consulting Intern  
April 2019-  
May 2020

- Implemented market research & strategic communications projects by designing questionnaires, cleaning data sets, analyzing research results, & creating report 'A New Future for Commercial Vehicles'
- Exhibited exceptional critical thinking skills organizing interview memos with an understanding of investigation topic, & abstracting key information
- Supported project management tracking status, creating timelines, & ensuring accuracy.
- Prepared clients by creating plan & providing daily updates throughout their participation.

## Yuhui (Rika) Liu

Rika has demonstrated expertise in quantitative methodologies and a solid understanding of financial economics theory and practice.

- She has practical experience in the financial industry, including internships in top financial institutions in both the U.S. and China.
- Rika also has proven team leadership capabilities and outstanding communication skills within a fast-paced competitive environment.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BA (Honours) with Distinction  
Mathematical Economics  
(Mathematics & Economics)  
University of Waterloo  
2020

**Project:** The Magnet Effect of Daily  
Price Limits: Evidence from the  
Chinese Stock Market  
**Project:** Forecasting Volatility of  
Different Stock Markets Using EGARCH

### SKILLS

Programming: Python; R; MATLAB;  
SQL; VBA  
MS Excel, PowerPoint, Access

### PROFESSIONAL CERTIFICATES/AWARDS

CFA Level I Candidate

### INTERESTS/ACTIVITIES

Quantify Risk & Insurance Case  
Competition: Team Leader 2019

### EXPERIENCE

Marto-HG Digital Asset Group, NYC, New York May 2019-  
Cryptocurrency Analyst Intern August 2019

- Collected data of major cryptocurrencies worldwide & developed ARIMA models to forecast their price trends
- Researched the cryptocurrency market & prepared weekly reports for senior management's review
- Assisted portfolio managers to provide investors with investment recommendations in the format of presentation materials

Acceleration Capital Group, NYC, New York December 2018-  
Hedge Fund Analyst January 2019

- Conducted statistical analysis on stocks in targeted hedge funds' portfolio allocations with due diligence;
- Collected & researched target companies' information & historical data to evaluate their financial performance
- Presented investment recommendation reports to senior-level analysts accordingly;

University of Waterloo, Waterloo January 2018-  
Teaching Assistant May 2018

- Conducted tutorials, labs & workshops to provide support & guidance to students;
- Led individual tutorials for students who needed extra support
- Graded assignments, quizzes and term exams & invigilated tests

Bank of China, Weihai, China January 2017-  
Asset Management Intern March 2017

- Worked as part of the wealth management team to compile and analyze data, & track information according to clients' needs
- Collaborated with peers to build and develop relationships with existing and new VIP clients

## Yuzhou Liu

Yuzhou is passionate about using the power of data science & technologies to solve challenging tasks in business. He is a keen learner with ability to multi-task under pressure demonstrated through his double degree studies. He has well-rounded experience in various analytics roles, including product management, system analysis, actuarial valuation & business analysis.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc & BEcon  
Statistics & Actuarial Science  
Jilin University  
2019

### SKILLS

MS Excel VBA; SQL; Python; R; MATLAB;  
SPSS;  
Familiar with C; Prophet

### PROFESSIONAL CERTIFICATES/AWARDS

Society of Actuaries  
P (Probability);  
FM (Financial Mathematics)

COMAP's Mathematical Contest in  
Modelling: Meritorious Winner 2018

Mathematical Competition of Chinese  
College Students: Scholarship 2018

### INTERESTS/ACTIVITIES

3rd Japan-China Joint Forum:  
Researcher  
On-Campus Volunteer

### EXPERIENCE

ByteDance Ltd., Beijing, China August 2020-  
Data Product Manager Intern, Monetization Product Present

- Carried out functional design, interface optimization, testing, and application for the iteration of toB labeling platform to optimize the targeted advertising
- Promoted the development of a content understanding system to target user interests and behaviors through effective identification and classification of texts and videos by scenes
- Validated model feasibility and effectiveness through evaluation index system, flow experimentation, and A/B test

Accenture (China) Co., Ltd., Shanghai, China August 2019-  
Consulting Intern, Financial Services December 2019

- Participated in Data System & Process project for pension company, resulting in more efficient analysis systems
- Analyzed system structure & automated data process
- Provided solutions of quantitative methods transition for actuary & finance sectors due to the IFRS17 implementation

Ping An Life Insurance Company of China, Shenzhen, China March 2019-  
Intern, Actuarial Valuation June 2019

- Developed tools for data access & empirical analysis (Oracle, Excel); rewrote 100+ scripts from SQL to Python
- Analyzed historical incidence data based on the risk exposure calculation and reported the fluctuation
- Revised the policy continuation rate assessment; analyzed reasons for the rate decline internally & externally

# Tianyu (Erin) Ma

Erin is self-motivated and passionate for finding optimal and innovative solutions. She has a solid academic and technical background, accompanied by proven working knowledge. With excellent leadership and communication skills, she speedily adapts to new environments and is eager to solve challenging problems.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BMath (Honours) with Distinction  
Actuarial Science & Statistics  
University of Waterloo  
2020

Relevant courses: Life Contingencies;  
Pension; Forecasting; Computational  
Statistics; Data Analysis

University of Waterloo President's  
Scholarship  
2016

## SKILLS

Programming: Python; VBA; Racket; SQL;  
R; SAS

## PROFESSIONAL CERTIFICATES/AWARDS

### Society of Actuaries

P (Probability);  
FM (Financial Mathematics);  
LTAM (Long Term Actuarial Mathematics)  
& all VEE credits

## INTERESTS/ACTIVITIES

UWaterloo Actuarial Science Club:  
Executive Member  
Chinese 21-string Zither (Passed Level 9  
Test); Baking; Yoga; Volunteer

## EXPERIENCE

Microsoft, Beijing, China  
Data Analyst Intern

May 2019-  
August 2019

- Analyzed data extracted from SQL Azure databases in China & Japan; implemented software functions in Scope
- Completed technology-based data reports with Power BI & implemented real-time monitoring of date changes
- Performed routine tasks of data cleaning by reviewing computer reports, printouts, & performance indicators to locate and correct coding problems in Python
- Participated in business analysis for the product team with data mining techniques & achieved 2% advertisement revenue increase

Hack the North, Waterloo

September 2018

Group Facilitator

- Assigned 20 group members to different sections & responsible for all emergencies; developed strong problem-solving skills & the capability to adapt to over-changing environment
- Developed strong leadership, communication, & teamwork skills

Pennon Education Group, Jinan, China  
Math Teaching Assistant

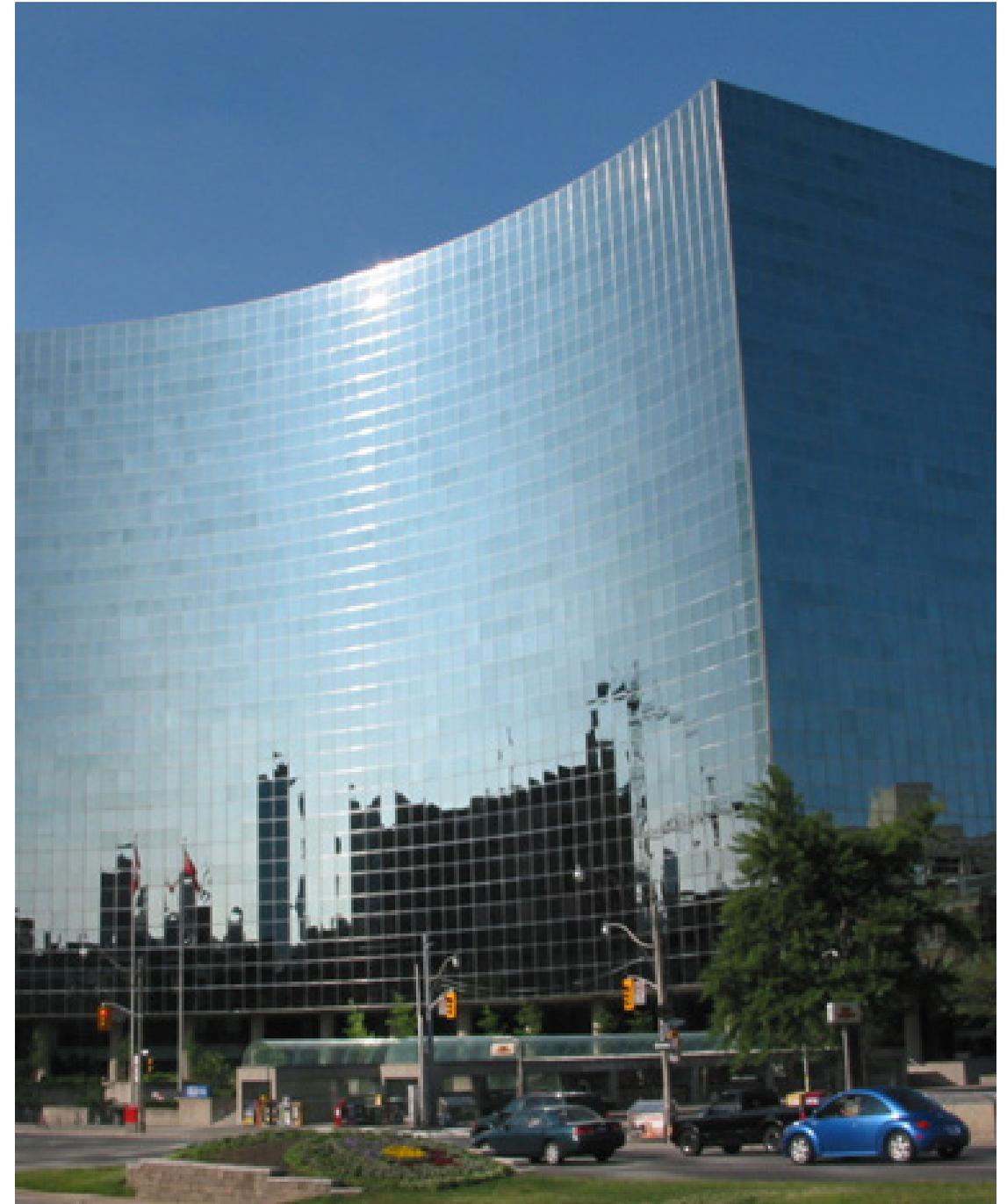
May 2018-  
August 2018

- Prepared tutorials designed to cultivate strong presentation & critical thinking skills for 30 students
- Developed skills in Microsoft Office & Adobe Premiere Pro

Forecasting Project

March 2019

- Demonstrated solid data analysis skills through removing missing values & cleaning thousands data by using data transformation & imputation in Python



# Huasi (Iris) Ou

Iris has strong analytical skills and solid scientific research skills gained through academic study, undergraduate lab courses and as a lab intern in the pharmacological field. Detail oriented with the ability to work collaboratively in a team environment, she has excellent leadership and communication skills with experience in organizing various on-campus and volunteer activities.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BA (Honours) Economics  
York University  
2020

BSc (Honours) Pharmacy  
Foshan University  
2017

## EXPERIENCE

Blockstation October 2019-  
Analytical Intern April 2020

- Analyzed data & performed data visualization projects of legacy IPO and tokenized IPO by using Microsoft Excel and Python, the results were used in analyzing & presenting
- Researched and made comparisons to support reports examining digital asset market
- Refined and enhanced applicative knowledge of statistical methods & concepts while conforming to tight deadlines

Guangdong XiangHe Chinese Medicine December 2016-  
Pharmacological Factory May 2017  
Lab Intern

- Performed ingredient quality analysis of the medicines by extracting & analyzing, which provided various detailed experimental data
- Designed template for report & automated the process of calculation, significantly improving quantitative proficiency of delivering multiple quality reports
- Oversaw the distribution & packaging of medicines in an effective manner, significantly reducing the drug shortage & improving the efficiency in drug allocation

## SKILLS

Programming: Python; R; SAS; VBA;  
Excel

## PROFESSIONAL CERTIFICATES/AWARDS

SAS Advanced Certification 2018  
Financial Markets: Yale University 2019

## INTERESTS/ACTIVITIES

Markham Councilor Community October 2018-  
Event Organizer & Host July 2019

- Organized the councilor's campaign events including planning advertising, community events & public speaking (MC), which contributed to the success of election campaign

# Shiya (Sophie) Ou

Sophie has a strong quantitative background & financial analytical skills gained from professional experience in the insurance industry. She is detail oriented, able to meet conflicting deadlines, and deal with stressful situations in a calm, professional manner.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours) Actuarial Science  
University of Western Ontario  
2020

Dean's Honour List: 2016-20

Credit Risk Project:  
Manipulating data & analyzing credit  
risk ratings & reporting results  
2020

## SKILLS

Programming: R; Python; SAS; SQL;  
LaTeX; MS Excel

## PROFESSIONAL CERTIFICATES/AWARDS

Society of Actuaries  
P (Probability);  
FM (Financial Mathematics)

SAS 9.4 Base Programming Certificate

## INTERESTS/ACTIVITIES

Swim Varsity, London, ON  
Frontier College, London, ON: Volunteer  
Chinese Student & Scholars Association:  
Event Executive  
Western Golden A: Tutor - Actuarial Science

## EXPERIENCE

Munich Re, Singapore July 2020-  
Actuarial Intern (Remote) September 2020

- Collected & analyzed quotations, product features for RBC & BMO term life insurance contracts of a target group from aged 20 to 30 & developed analysis to drive insight of each company's business strategy
- Developed actuarial valuation modeling tool for term life products by analyzing BE assumption, number of decrement & lapse rate; calculated premium & claim cash flow which increased efficiency of analysis and automated scenarios
- Reviewed PingAn CI product's comprehensive ES report: analyzed product's target group and applied actual claim data to calculate A/E, adjusted A/E by Credibility factor; provided improvement of BE assumption to senior management

Pin An Insurance, Guangzhou, China July 2019-  
Summer Intern September 2019

- Researched multiple market products & compared similarities/differences on existing products to new product
- Showed critical thinking capabilities by indicating purchasing motivations from clients for the new product.
- Delivered presentation & comprehensive reports of new products profitability analysis to the teams based on calculations of inforce statistics, cash flow/claim ratio analysis & information gathered from current market trends
- Illustrated outstanding teamwork ability through supporting team to complete financial reporting tasks & presentations for a travel insurance product

# Jingyao (Joyce) Qiao

Joyce has a strong background in data science. She is intellectually motivated with a proven history of generating results through exceptional communication, leadership, time management, fast learning and quantitative skills. She is passionate about contributing to the growth of others, leveraging her quantitative expertise, and most essentially achieving goals.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours) Applied Mathematics  
York University  
2020

Continuing Studies Scholar & Dean's  
Honour List 2017-2020

Linear Regression Model Development:  
Team Leader  
Combinatorial Optimization Problem:  
Team Leader

## SKILLS

Programming: Python; MATLAB; SAS; R  
& Maple  
Language: English; Mandarin

## PROFESSIONAL

### CERTIFICATES/AWARDS

CFA Level 1: 2020 Candidate  
Bloomberg Market Concepts (BMC)  
Certification, 2019

Financial Engineering & RM Certification  
Part 1, 2019 (Columbia University)

## INTERESTS/ACTIVITIES

Badminton; Cooking; Succulent plants

## EXPERIENCE

Springer Garden Inc.

Business Development Manager

- Developed exceptional communication & customer facing skills whilst upholding high degree of courtesy & professionalism
- Responsible for seeking out prospective opportunities through networking
- Developed negotiation skills through dealing with merchants to facilitate purchase orders

Lyndex Technology

Research Analyst

- Conducted research using primary & secondary data to assist with the firm's strategic expansion strategy
- Collaborated with team members & shared opinions regarding recommended strategies for clients situated overseas in China
- Enhanced knowledge & technological proficiency in using MS Suite to complete daily objectives

GPA Plus Education Inc.

Mathematics tutor

- Prepared lecture notes & create mock tests for students
- Utilized expertise to instruct university level subjects such as Calculus
- Improved communication skills answering questions in clear & concise manner

July 2019-  
August 2020

July 2019-  
October 2019

May 2018-  
April 2019

# Kevin Wang

Kevin has a strong background in Economics and Statistics. He is an enthusiastic and self-motivated learner who is equipped with strong financial modelling, risk management, statistical models and financial analysis skillsets. He possesses extremely high working efficiency, superior time management, excellent leadership skills, and high-quality working performance.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BA (Honours) with High Distinction  
Economics Specialist; Statistics Major  
University of Toronto  
2020

Dean's List: 2017, 2020

## SKILLS

Programming: MS Excel; R; Python;  
STATA; SAS  
Language: English (fluent); Mandarin  
(Native)

## PROFESSIONAL CERTIFICATES/AWARDS

SAS Certified Specialist; Advanced  
Programming SAS 9.4  
Canadian Securities Course:  
Passed 2019

## INTERESTS/ACTIVITIES

Chinese Undergraduate Association  
Public Relations 2019  
Photography; Piano; Saxophone;  
Basketball; Swimming;  
Weight Loss Training

## EXPERIENCE

Bank of China, China

Assistant Finance Manager Intern

- Organized clients' & companies' background information and financial status through Excel & SAS
- Utilized dataset to differentiate customers' preferences & design specific product segmentation by market types
- Provided technological support to clients daily to improve customer satisfaction & ensure smooth operations
- Communicated with 100 clients on their financial standings and offered valuable investment advice

TOA (China) Ltd., China

IT Assistant Intern

- Applied Python to monitor & run tests on the connections among public address system, microphone, and the speakers
- Provided assistance on technology mainly to the Sales Department which contributed to raising performance standards
- Participated in site-specific investigations, field trips, and daily group meetings with clients

University of Toronto

**Project:** Bank of Canada Competition

"Governor's Challenge" using STATA

- Offered statistical inference and analytical framework to support main views & policy recommendations

June 2019-  
August 2019

May 2016-  
August 2016

## Qiwen (Wendy) Wang

Qiwen has a solid academic background in finance, statistics and programming with multiple internships in capital markets and the technology field. She is a self-motivated, goal-oriented, and cooperative person who can perform well in both personal and team work.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BMath (Honours)  
Financial Analysis & Risk Management  
(Professional Risk Management  
Specialization)  
University of Waterloo  
2019

### SKILLS

Programming: Python; R Studio;  
MATLAB; SQL

### PROFESSIONAL CERTIFICATES/AWARDS

CFA Level I: 2019  
FRM Level I: 2018  
FRM Level II: 2019

### INTERESTS/ACTIVITIES

Travelling; Fitness; Playing "Go"  
University of Waterloo:  
Volunteer Residence Tour Guide

### EXPERIENCE

Hangzhou Jianglong Investment Management Co., China May 2020-  
Futures Trader June 2020

- Managed futures in rapeseed, palm, & soya-bean oil market
- Analyzed the market using the fundamental analysis based on government policies, international relationships, or plant growth cycle, etc.
- Evaluated some basic hedge & arbitrage methods

Fintelics, Toronto February 2020-  
Business Analyst April 2020

- Converted business requirements into detailed use cases & effectively communicated with technical teams for an automatic payroll system
- Programmed with python and created a pipeline to analyze data related to company stock & dividend prices
- Conducted deep exploratory data analysis to identify important features and installed AWS Lambda and S3 bucket to save code and image as the result of analyzing
- Collaborated with business team to complete QA tests & ensured timely and accurate report regarding feature improvements for QA tests.
- Provided consult for our company & presented cases to manager

Rural Commercial Banks, China July 2017-  
Trading Assistant August 2017

- Analyzed existing AML (Anti-Money Laundering) policies and procedures
- Created AML alerts for unusual transactions

## Yuling (Tim) Wang

Yuling is a detail-oriented team player with great leadership and interpersonal skills demonstrated through work experience in the insurance and risk management industry.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc Applied Statistics & Fintech  
Renmin University of China  
2020

Outstanding Graduated Award: 2020

### SKILLS

Programming: Python; R; SQL; VBA; C

### PROFESSIONAL CERTIFICATES/AWARDS

Society of Actuaries  
P (Probability);  
FM (Financial Mathematics);  
STAM (Short Term Actuarial Mathematics);  
LTAM (Long Term Actuarial Mathematics);  
IFM (Investment & Financial Markets)

Society of Actuaries Student Case Study  
Challenge Semi-Finalist (First Mainland  
China Award Winner): 2019

AIA Actuarial Excellence Scholarship: 2019

### INTERESTS/ACTIVITIES

Tennis; Director of External Affairs  
and Event Planning at Actuarial Club,  
Renmin University of China

### EXPERIENCE

Renmin University of China April 2019-  
Research Assistant April 2020

- Researched weather index insurance & long-term care insurance
- Developed a quantitative risk model to measure crop failure risks using R and Principal Component Regression
- Interviewed staff and clients of nursing homes & analyzed the need for long-term care insurance in China

Swiss Reinsurance, Beijing, China July 2019-  
Actuarial Intern, Business Development January 2020

- Independently conducted monthly industry research
- Conducted half-year financial performance analysis for top insurers in China & detected profitable opportunities
- Assisted with the consultation reports for clients
- Independently prepared the embedded value report for New China Life Insurance Company & presented report

Price Waterhouse Coopers, Beijing, China December 2018-  
Risk Audit Intern February 2019

- Assisted with the annual audit for China State Construction and Engineering corporation
- Independently developed a risk assessment model using R to estimate the financial risk of different construction projects
- Reviewed the accounting statements of the client and prepared audit reports

Aegon THTF Life Insurance Co., Beijing, China December 2018-  
Underwriting Intern February 2019

- Assisted with critical illness insurance underwriting & processed clients' information data using VBA to assess risk

## Hanzhi (Jessie) Wu

Jessie possesses excellent oral and written communication skills and able to tailor communication level and style to the audience to ensure effective transfer of information. Highly motivated, she remains current in the industry by continuously enhancing professional knowledge and has the ability to work collaboratively with others to meet client needs and achieve team goals.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours) with High Distinction  
Actuarial Science, Economics & Statistics  
University of Toronto  
2020

Eileen Dolman Award  
(scholarship for outstanding  
academic achievement): 2017  
Dean's List: 2017- 2020

### SKILLS

Programming: Python; R;  
MS Office including Excel  
Language: English & Mandarin; Spanish  
& Korean beginner

### PROFESSIONAL CERTIFICATES/AWARDS

**Society of Actuaries**  
P (Probability);  
FM (Financial Mathematics);  
IFM (Investment & Financial Markets)

### INTERESTS/ACTIVITIES

Sports; Gold Medal: Long Jump

### EXPERIENCE

United Automotive Electronic Systems Co., Ltd., China May 2017-  
Intern, Cost Accounting Dept. of Body Electronics July 2017

- Calculated & analyzed statistical data using Excel to yield final cost
- Gained understanding of the organization structure by having meetings with tech team staff, developed & established a cost-efficient system of data processing
- Effectively organized & prioritized work load to ensure all tasks were met in a satisfactory and timely manner
- Analyzed options available for cost accounting & built a model in Microsoft Excel; implementation led to successful calculation of cost
- Developed strategy for aggregating & summarizing data, resulting in increased work efficiency

University of Toronto October 2020-  
Teaching Assisatnt Present

- Deliver a range of teaching and assessment activities including weekly office hours for a group of 40 students, advised on skills methods and techniques to assist the transfer of knowledge
- Participate in the assessment process and provide effective timely and appropriate feedback to students

University of Toronto Chinese Music Club September 2016-  
Design Director September 2018

- Effectively led a team of 6 people to design & produce posters/brochures for promotion of the club's events
- Key organizer in annual singing competition – audience attendance throughout a year was 1,000+
- Organized conferences with department members, paid attention to innovation, & increased overall work efficiency

## Hongda (William) Wu

William has a strong background in Actuarial Science and Statistics. His career passion lies in actuarial science, finance, and quantitative risk management. With superior critical thinking skills, he is intellectually curious, and he always takes initiative for continuous self-improvement. He is able to work independently with minimal supervision and collaboratively in a team environment.

### EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BMath (Honours)  
Actuarial Science & Statistics  
University of Waterloo  
2020

Project: Imputation for Missing Values  
2020

### SKILLS

Programming: Python; R; VBA; SAS;  
Java; Minitab  
MS Office

### PROFESSIONAL CERTIFICATES/AWARDS

**Society of Actuaries**  
P (Probability);  
FM (Financial Mathematics);  
IFM (Investment & Financial Markets);  
LTAM (Long Term Actuarial Mathematics);  
STAM (Short Term Actuarial Mathematics);  
VEE credits: Economics;  
Mathematical Statistics; Corporate Finance

### INTERESTS/ACTIVITIES

Participate in Rubik's Cube competitions  
with a personal best of 8.61 seconds  
Basketball; Hiking

### EXPERIENCE

University of Toronto September  
Teaching Assistant 2020-  
Present

- Reinforce problem-solving and communication skills through answering questions and explaining concepts to students during office hours
- Conduct weekly meetings with the instructor and other teaching assistants to discuss feedback from students; Modify lecture and tutorial structures accordingly

Alltrust Insurance Company, Shanghai, China May 2019-  
Actuarial Intern August 2019

- Performed loss experience analysis in Excel for various types of insurance products with annual premium of \$10 million including auto, homeowners, and liability insurance
- Researched drone insurance regulations, assisted in writing insurance clauses, and presented the research results to senior managers
- Gained exposure to minimal capital test of insurance risk and loss reserving valuation methods such as Expected Loss Ratio Method and Chain Ladder Method

Intramural Basketball Team, Waterloo September 2015-  
Team Captain December 2019

- Effectively communicated with basketball coordinator and teammates for scheduling games
- Promptly resolved conflicts during basketball games to ensure the game runs smoothly

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours)  
Actuarial Science, Statistics &  
Computer Science  
University of Toronto  
2020

## SKILLS

Programming: Python; Java; VBA; R; C;  
SQL; HTML

## PROFESSIONAL CERTIFICATES/AWARDS

The Lawrence and Sharen Ho  
International Scholarship  
2018

## INTERESTS/ACTIVITIES

Travel; Cooking & Food; Hiking

# Yaru Yang

Yaru has solid multitasking and time management skills, with significant experience in website data scripting and excellent presenting and communication skills. Having strong problem-solving skills with a robust research background and trouble-shooting experience, he has worked in culturally diverse environments and clients from different academic and working profiles.

## EXPERIENCE

University of Toronto  
Teaching Assistant  
September 2016-  
Present

- Create learning materials, organizing tutorial schedules, & hold tutorials to enhance students' academic knowledge as well as communication and writing skills
- Help student clarify questions and provide answers within a 6-hour time-around
- Introduce technology solutions to triage students' questions to maximize time in tutorials for prioritized tasks

Society of Actuaries Case Competition: Semi-Final  
March 2019

- Designed a new autonomous vehicle insurance policy to add to the competency of the company in his newly developed industry by forecasting launch date, pure premium & its change in ten years
- Managed project in terms of project planning, schedule & delivery
- Analyzed traditional historic data to predict forthcoming product to develop the ability to create models, upgrade application of time series, model validation

Canada Revenue Agency  
Data Analyst/Cross-functional Analyst  
January 2017-  
August 2017

- Used programming language (VBA) to script data from hundreds of websites to get millions of different types of unstructured records which are parsed into excel format
- Analyze data, make assumptions & prove the hypothesis varying by industry
- Developed problem-solving skills by finding an alternate way to achieve goals

# Chenming (Ming) Ye

Chenming has exceptional organizational and planning skills demonstrated through large event planning and her professional background in mathematics has developed strong analytical skills along with excellent interpersonal skills. Chenming's attention to detail has been proven as a notetaker with recognition for excellence.

## EXPERIENCE

Project: Analysis of Housing Price Index and Its Influence  
Factors  
October 2019-  
November 2019

- Reprocessed data from US government database according to population region, processed and merged data frames, and summarized data by utilizing reshape2, dplyr, and tidyverse in R language
- Visualized the influence of population to housing price index by drawing GIF and heatmap, and
- completed linear regression with ggplot, gganimate & plotly

Project: Self-Service Shift Schedule  
May 2019-  
August 2019

- Constructed the self-service shift schedule with the full-scale algorithm to consider all the situations in Python
- Created the visible schedule board to keep track of the availability of working time
- Displayed the summary of user's working information once the employee ID was inputted
- Wrote readable code in a decent way by reasonable comments and separating code into multiple functions

Hangji County, Hunan Province, China  
Teaching Assistant Volunteer  
March 2018-  
June 2018

- Organized basic math courses of from Grade 1 to Grade 6 for 50+ students, collaborated with other volunteering teachers to track & encourage students' participation
- Raised approx. 5000 educational funds by selling 400 sets of customized postcards which shows students' daily life
- Utilized the additional funds to pay for 200 books & sponsored the best 10 students a textbook grant

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours)  
Financial Modeling Specialization  
Western University  
2020  
Gold Medal – Highest standing in the  
Honours specialization program

Dean's Honour List

## SKILLS

Programming: Python; R; MATLAB; VBA;  
C++

## PROFESSIONAL CERTIFICATES/AWARDS

Society of Actuaries  
P (Probability);  
FM (Financial Mathematics);  
IFM (Investment & Financial Markets)

Applied Data Science with Application:  
Coursera

## INTERESTS/ACTIVITIES

Graphical Designer



# Ruolin Yuan

Ruolin is a motivated analyst with experience in business reporting, creating dashboard, business process automation and experience completed in quantitative finance and investment. She is incredibly attentive to detail achieving accurate results and an adaptive team member, producing excellent work and collaborating well to achieve group performance.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

MSc Computational Finance  
University College London, U.K.  
2017

Relevant Courses: Portfolio Theory;  
Numerical Analysis;  
Financial Engineering; Stochastic  
Process; Networks; Systemic Risk

BSc Statistics  
University College London, U.K.

## SKILLS

Programming: Python; SAS; R; Tableau;  
MATLAB; VBA; Excel

## PROFESSIONAL CERTIFICATES/AWARDS

Society of Actuaries  
P (Probability);  
FM (Financial Mathematics)

SAS 9.4 Base & Advanced Certificates  
CFA Level I Candidate

## INTERESTS/ACTIVITIES

Badminton; Swimming; Calligraphy;  
Writing movie reviews

## EXPERIENCE

Yanc Data Consulting, Toronto  
Data Analyst  
August 2019-  
November 2019

- Reduced cost by over 30% by developing methods identifying bad performance products using Python
- Manipulated retail customers data & order lists from database by writing multiple SQL queries
- Automated & optimized reporting & data reconciliation processes increasing productivity by 35%

Trust Plus, Toronto  
Assistant  
November 2017-  
February 2019

- Performed data cleansing & conducted data analysis
- Collaborated with cross-functional team to produce report
- Built statistical models (eg, mixed effect models) to estimate the minimum satisfaction score using R and Python

DataSpartan, London, U.K.  
Quantitative Analyst Intern  
June 2017-  
September 2017

- Contributed a trading strategy with expected Sharpe ratio, which was 4% higher than US benchmark
- Performed data cleaning after extracting from both Yahoo Finance and Thomson Reuters Eikon using Python
- Introduced multiple supervised machine learning techniques to train models and forecast stock price

China Investment Corporation, Beijing  
Analyst Intern  
June 2016-  
August 2016

- Researched targeted industry & completed industry and companies research report independently
- Monitored stock price of targeted manufacturers

# Yuxuan (Gina) Zhang

Gina has a strong background with proven working experience in the insurance industry. She is goal oriented, a fast learner with passion and curiosity for quantitative analytics and actuarial modeling. She is actively pursuing the ASA designation and is an excellent communicator who thrives working in a high performing environment.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BSc (Honours) High Distinction  
Actuarial Science Specialist &  
Statistics Major  
University of Toronto  
2020

U of T New College In-Course  
Scholarship

## SKILLS

R; Python; VBA

## PROFESSIONAL CERTIFICATES/AWARDS

Society of Actuaries

P (Probability); FM (Financial Mathematics);  
STAM (Short Term Actuarial Mathematics);  
SRM (Statistics for Risk Modelling);  
IFM (Investment & Financial Markets)  
& all VEE components

**GARP Financial Risk Manager (FRM):**  
Level 1 (2019)

SOA Case Competition: Global Semi-Finalist  
RBC Tomorrow Summer Student Challenge:  
Finalist

## INTERESTS/ACTIVITIES

U of T Mentorship Program: Mentor

**U of T New College**

Student Council Representative  
Orientation Leader

## EXPERIENCE

University of Toronto  
Teaching Assistant  
January 2020-  
Present

RBC Insurance, Toronto  
Actuarial Analyst Intern, Group Pricing  
May 2020-  
August 2020

- Automated the process of analyzing the impact of Covid-19 on monthly claims, guiding the company to offer more competitive pricing of short-term disability insurance products
- Suggested semi-annual adjustments on manual rates that have misaligned with the insured companies' profit level
- Updated pricing & analysis reports such as long-term disability movement, cost structure analysis & compensation reports, providing the company with the latest market trends
- Built a commission comparison calculator to improve the efficiency of the underwriting team in comparing scales between multiple carriers.

Society of Actuaries  
Research Student  
January 2019-  
March 2019

- Leveraged actuarial methodology to design an insurance policy for autonomous vehicles
- Analyzed potential data, suggested actuarial assumptions & forecasted the future trend in pure premium.
- Researched topics related to autonomous vehicles & presented report

Bank of China, Beijing, China  
Risk Assessment Intern  
July 2017-  
August 2017

- Assisted in the coordination & execution of Risk Assessment & Due Diligence on a portfolio of clients
- Monitor risk exposures & prepare monthly portfolio reviews

# Sichao (Michael) Zhu

Michael is a highly motivated proactive learner with excellent interpersonal skills demonstrated through work experience. He has a strong ability to thrive in a dynamic environment and highly effective at identifying problems and generating solutions. Experienced in quantitative modelling and statistical learning, Michael also has a keen interest in financial markets and risk management.

## EDUCATION

Master of Financial Insurance  
University of Toronto  
2020 - 2021

BMath with Distinction  
Actuarial Science & Statistics (Co-op)  
University of Waterloo  
2020

## SKILLS

Programming: MS Excel; VBA; SAS; R;  
SQL; Python; C; Racket; MATLAB

## PROFESSIONAL CERTIFICATES/AWARDS

CFA Level I Candidate

## INTERESTS/ACTIVITIES

UWaterloo Actuarial Science Club:  
Mentor (2017-2020)

Certified Bartender, Toronto Institute of  
Bartending  
Quantify Insurance & Risk Consulting  
Case Competition: Top 5 submission  
(2018)

Ecoteer, Perhentian Island, Malaysia:  
Volunteer

## EXPERIENCE

PwC Canada, Toronto  
Consulting Intern  
January 2019-  
December 2019

- Demonstrated financial analysis skills by supporting end of year/quarter valuations & capital adequacy testing
- Conducted reserve analysis to support the firm's audit function
- Showed critical thinking skills by performing peer reviews for other companies' end of year appointed actuary reports
- Migration to new software for call clients
- Displayed ability to handle & process confidential information complying with the code of professional ethics
- Highlighted exceptional writing and presentation skills by independently preparing a detailed report of the year-end process

RSA Canada, Toronto  
Analytics Intern  
September 2017-  
April 2018

- Provided analytical support to pricing teams via generating analytic reports on geospatial data using QGIS, SAS and R
- Exhibited excellent GIS skills by streamlining geospatial data mapping methods & integrating the existing flood insurance rating model

- Conducted quantitative analysis & modelling on fraud claim data
- Performed text mining on auto policies in supporting cross-selling of property products

Foresters Financial, Toronto  
Actuarial Intern  
December 2016-  
April 2017

- Showcased skills in financial analysis by using Access & Axis to support the US Year End Statutory Valuation for various insurance products
- Performed Axis quarter end runs to document impact & sensitivity analysis results

# Meet Our Alumni

“The MFI taught me to be confident and strong in networking and communication, deep and diversified knowledge, and to keep pace with the new development frontier of the financial market and relevant technologies.”

Meng (Moriah) Yu, MFI 2018  
MFI Academic Award Recipient 2018

“My time at U of T was nothing but an unforgettable experience. I am highly thankful for the depth of knowledge the MFI program has armed me with. It is a privilege to be part of such a great program.”

Adrien Brice Nouya, MFI 2017

“The MFI is a great professional program combining quantitative finance with actuarial science, which gave me more career choices as insurance and finance industries are blending together. Also, the internship opportunity opens the door of my future career.”

Yuting Chen, MFI 2019

“The MFI Program taught me to challenge myself... I really enjoyed my experience with the MFI Program and appreciate this unique opportunity to explore and improve myself from distinctive perspectives.”

Naibing (Irina) Zhang, MFI 2018  
MFI Ambassador Award Recipient 2018

“I am currently working in Global Banking and Markets Audit at Scotiabank. I went to MFI in 2016 after my undergraduate in financial engineering. Through the courses and internship, I learned financial and risk management knowledge and improved my programming skills, which are widely used in my job. In addition, MFI also offers great networking opportunities for me to meet with professionals in different financial areas.”

Siying Feng, MFI 2017

“Before joining MFI, I graduated from UofT in Statistics and Quantitative Finance. The MFI program allowed me to develop deeper thinking and explore ideas regarding a field that really interests me – finance. In addition to strong academic support, the Program also organized a variety of extracurricular activities and meetings; hearing from guest speakers and lecturers ensured plenty of opportunities to gain industrial insights and engage with my knowledge from multiple angles. I am currently working in Total Portfolio Management at Canada’s largest pension fund, CPPIB. And now, I can say with confidence, that MFI better prepared me for my career.”

Yiwen (Sophia) Zhang, MFI 2017  
MFI Ambassador Award Recipient 2017

“I am applying what I have learnt in the MFI Program, both the quantitative skills as well as soft skills, into practice. Now working at Great-West Life, I am really grateful for the MFI experience!”

Jiating (Lisa) Sun, MFI 2018  
MFI Business Acumen Award, 2018

“I had completed my bachelor degree in Mathematics and Statistics at UofT, and having come out with lots of knowledge, but very little work experience, I realized that I needed a stepping stone before I am able to join the industry. Throughout the program I gained invaluable skills, through more advanced coursework, seminars and lectures given by industry experts and through working through real-life problems. Now I work in TD’s Model Validation team, feeling that MFI did indeed give me the help that I needed so much, in order to have a more productive and successful career.”

Alexey Pakhuchiy, MFI 2017



# Our 2020 MFI Award Recipients

## MFI Academic Award 2020

Awarded to the MFI student with the best overall performance in coursework throughout the year

**IAN WENG (SOPHIA) CHAN** graduated from the UofT before joining the MFI Program. She completed a summer research project with Professors Andrei Badescu and Sheldon Lin in the Department of Statistical Sciences and is continuing her academic career pursuing a PhD. Congratulations Sophia!



“The MFI program combines the insights of the financial markets with the traditional insurance field. It offers courses not only in these two fields, but also in data science, machine learning and time series analysis. From my point of view, the MFI program has a great balance between theories and practices – I have the opportunities to implement the theories and methodologies learnt through various group projects and case studies. This helps to deepen my understanding and promotes my critical thinking skills.

I am grateful that U of T offers the MFI program which on one hand allows me to continue my investigation in actuarial science and its related fields, while on the other hand develops my professionalism through networking events, seminars conducted by industrial professionals and industrial internship in the summer.

I am now pursuing a PhD in actuarial science at U of T, so I have chosen to do a research project in lieu of the summer internship. This is probably beyond the expectation of most people since the MFI prepares students primarily for professional world, however, my experience has proven the possibility

of continuing study despite graduating from a professional program. Regardless of your future career plans, I would highly recommend the MFI program to all candidates interested in finance, insurance, and data science.”

**SOPHIA CHAN, MFI 2020**  
MFI Academic Achievement Award Recipient 2020

“Sophia impressed us highly from an earlier stage during her undergraduate years when she was the top student in her cohort in the Actuarial Science specialist program at University of Toronto. Upon graduation, she was admitted to the highly selective Master of Financial Insurance program. As a remarkable student who is highly intelligent and has great analytical skills, she was offered a summer internship by Northbridge Financial Corporation to work on insurance data analytics, which was unfortunately cancelled due to the Covid pandemic. She instead worked on a research project on pricing and reserving problems in general insurance under our supervision. The project required to perform a very thorough analysis of some most advanced modeling tools used by actuarial practitioners and academics. We could not be happier with her performance. Sophia is now a student in our highly competitive PhD program to further her studies in insurance predictive modelling and data analytics. We are very pleased to have an opportunity to supervise her.”

**Professor Andrei Badescu**  
Supervisor



**Professor Sheldon Lin**  
Supervisor



## MFI Business Acumen Award 2020

Awarded to the MFI student with the best overall performance in the internship, and presentations and discussion throughout the year

**TIANRUN PANG** graduated from the University of Waterloo and is currently working at TD where he secured a place on their highly competitive Rotational Program very soon after joining us at the MFI. He has consistently been an advocate for the Program and his classmates alike during industry visits and networking events, and also demonstrated excellent presentation skills. Congratulations on your well-deserved award Tianrun!



“The MFI program had constantly challenged us in its unique way, both intellectually and socially, with a plethora of projects, presentations, seminars, networking events. It is with challenge that comes opportunities – opportunities that helped me grow at a pace far beyond what I had fathomed. So many of my firsts happened here – first job interview, first networking event, first four-hour long final. I am ever so grateful for everything the MFI program has gifted me and the admin team has certainly done an excellent job!”

**TIANRUN PANG, MFI 2020**  
**MFI Business Acumen Award Recipient 2020**



“Tianrun joined the bank in June and has made an immediate contribution towards a number of projects within his current team. He is a motivated self-starter and is always eager to pitch in and add value. His strong work ethic is further enhanced by his curious nature, eagerness to learn, and willingness to accept new challenges. Above all, Tianrun brings a great attitude to the workplace and has been an absolute pleasure to work with!”

**RAFAEL SCHULMAN**  
**Senior Analyst Model Development, TD**



## MFI Ambassador Award 2020

Awarded to the MFI student who best embodies the values and qualities of the MFI Program, and whose fellow students see as the best representative of the MFI

**LUOLIN (COLIN) CHEN** graduated from the UofT in 2017. He joined the MFI Program in 2019 and soon built a great rapport with all his classmates and therefore was a popular choice as the Ambassador for his cohort. Colin has set up an MFI Alumni group on LinkedIn which shows great initiative to connect the class going forward. Congratulations!



“It is an honour for me to be part of the MFI program. The teaching team supported and guided me with their valuable insights and industry experience. They constructed the perfect studying environment to suit my background and interest in actuarial science, data science, and financial mathematics.

MFI also provided me opportunities to connect with industry professionals, and to further improve myself beyond academics.

With the wonderful experience I had in Manulife Investment Management, I was able to make connections between my knowledge and working practices, and to make an impact with my contribution. The platform MFI gave to me to meet my talented classmates is precious. With countless support, thoughtful discussion, and happy distraction, they completed my experience in MFI. With the strong bond among us, class of 2020 is the most treasured network for me in my future.”

**LUOLIN (COLIN) CHEN, MFI 2020  
MFI Ambassador Award Recipient 2020**

“It was a privilege getting to know and work with Colin over the three summer months he was with Manulife Investment Management. He is not only intelligent and diligent with strong technical skills, but is also extremely thoughtful and kind with his words. Colin worked closely with the compliance team, and was able to identify and properly address a significant number of issues that we are very grateful for. We wish Colin all the best in all his endeavors and are certain he has a bright future ahead of him.”

**Kathy Wang**  
Assistant Vice President, Investment Compliance  
Manulife Investment Management



# MFI Students Fall 2020!



Sadly due to Covid19 students have not been able to gather together in the classroom so far this year however those MFI students located in the Toronto area have found ways to safely bond over badminton, tree-topping & hiking!



## Program Contact Information

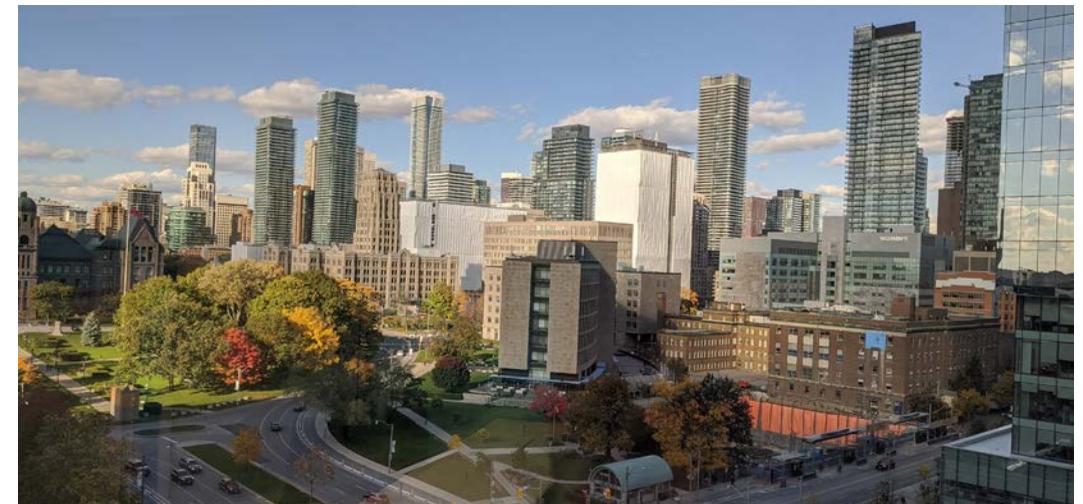
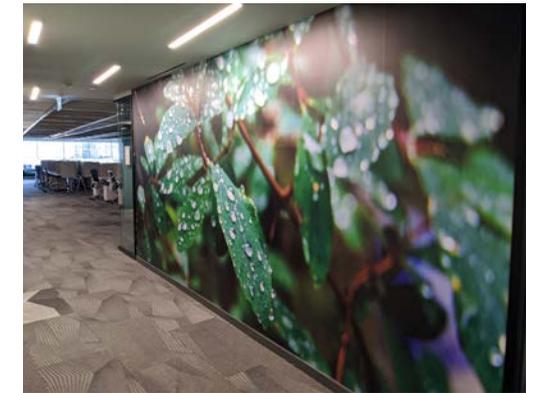
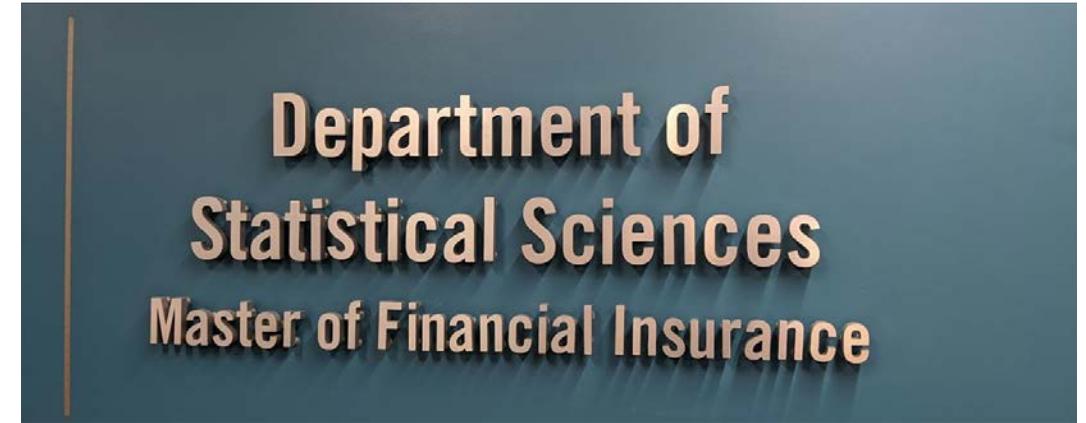
If you are interested in collaborating with the Masters of Financial Insurance program, or wish to receive the full resume of any of the students in the profile, the MFI Team would be delighted to hear from you!

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