

# Tianyu (Shin) Ren

MMF CANDIDATE · U OF T

🏠 [shin2suka.github.io](https://shin2suka.github.io) | 📧 [shin2suka](mailto:shin2suka) | 🌐 [tianyu-shin-ren](https://tianyu-shin-ren)

## Summary

Current 2020 MMF Candidate at U of T. 2nd Place and Best Visualization in 2019 ASA DataFest Competition. Proficient in Python (Pytorch, Numpy, sk-learn, Pandas), R, SQL, MATLAB and Excel. Experienced in machine learning and deep learning. Interested in devising a better problem-solving method for challenging tasks, and learning new technologies and tools to apply in finance.

## Education

### Master of Mathematical Finance, University of Toronto

Toronto, CA

CANDIDATE

Aug. 2019 – Present

- Relevant Course: Data Science; Pricing Theory; Stochastic Analysis; Volatility Modeling; Investment&Finance; Numerical Methods for Finance

### Honours Bachelor of Science, University of Toronto, GPA: 3.88/4.0

Toronto, CA

APPLIED MATHEMATICS IN FINANCE (SPECIALIST), STATISTICS (MAJOR) AND COMPUTER SCIENCE (MINOR)

Sept. 2015 – Apr. 2019

- Relevant Course: Real Analysis; Numerical Methods; Stochastic Processes; Probability Theory; Multivariate Data Analysis, Time Series; Optimization; Machine Learning; Statistical Learning; Deep Learning; Databases
- Dean's List Scholar (2017-2019)
- New College Student Council In-Course Scholarship (2016-2017)
- Student Ambassador, Department of Computer Science

## Work Experience

### Teaching Assistant

Toronto, CA

UNIVERSITY OF TORONTO

Sept. 2018 – Apr. 2019

- Led tutorials, holding weekly office hour, invigilated and graded tests for an undergraduate Data Science course (STA130)
- Covered topics including data visualization, data wrangling, statistical models and machine learning

### Business Analyst

Toronto, CA

SCOTIABANK, GLOBAL CAPITAL MARKET TECHNOLOGY, DERIVATIVES TRADING

May 2018 – Aug. 2018

- Worked in the Market Data System and Risk & Valuation Team, responsible for interest rate (IR) Curve mapping, automation PV regression testing, inflation swap PV testing, IR curve analytic, date utility tools (date rolling)
- Designed and Implemented an internal website for BA automation testing using Python Flask, HTML, and JavaScript, functionalities including login/logout, automation testing and displaying results through triggering Python scripts

## Projects

May 2019 **2019 ASA DataFest Competition**, University of Toronto

Toronto, CA

Mar. 2019 **Markov Chain Monte Carlo**, University of Toronto

Toronto, CA

Feb. 2019 **Yield Curves Bootstrapping**, University of Toronto

Toronto, CA

Feb. 2019 **MNIST Handwritten Digits Recognition**, University of Toronto

Toronto, CA

Jan. 2019 **CNN for Image Processing**, University of Toronto

Toronto, CA

Sept. 2018 **Decision Tree Classifier to Classify Real vs Fake News Headlines**, University of Toronto

Toronto, CA

## Extracurricular Activity

### Peer Mentor

Toronto, CA

DEPARTMENT OF STATISTICAL SCIENCE, UNIVERSITY OF TORONTO

Jan. 2018 – Apr. 2018

- Assisting students in overcoming obstacles of first year in university and providing support
- Organizing group meeting sessions monthly and discussing academic and career development

### Student Project Team, Event Manager

Toronto, CA

RISKLAB, UNIVERSITY OF TORONTO

Sept. 2017 – Aug. 2018

- Led a team to organize, promote and facilitate several large-scale professional events, topics including Risk Management, CFA, Big Data and FinTech
- Hosted Financial Data Case Competition by cooperating with RBC - Data Analytics and proudly provided internship opportunities to the winners, where we had over 30 teams registered