

# Tianyu Du

Graduate Student at Stanford University, Management Science & Engineering  
[www.tianyudu.com](http://www.tianyudu.com) | [tianyudu@stanford.edu](mailto:tianyudu@stanford.edu)

## LINKS

Website: [tianyudu.com](http://tianyudu.com)  
 Github: [github.com/tianyudu](https://github.com/tianyudu)  
 LinkedIn: [linkedin.com/in/tianyu-du](https://www.linkedin.com/in/tianyu-du)

## COURSEWORK

### GRADUATE

Probabilistic Machine Learning (A+)  
 Neural Net and Deep Learning (A+)  
 Machine Learning (A+)  
 Stochastic Processes (A+)  
 Data Mining (A+)  
 Causal Inferences (A+)  
 Optimization Algorithms (A)  
 Measure Theory (A)

### UNDERGRADUATE

Real Analysis (A+)  
 Advanced Calculus (A+)  
 Linear Algebra (A+)  
 Non-linear Optimization (A+)  
 Probability (A+)  
 Time Series Forecasting (A+)  
 Game Theory (A+)  
 Econometrics (A+)  
 Experimental Economics (A+)  
 Economics of Information (A+)  
 Market Design (A)  
 Combinatorics (A+)

## SKILLS

### PROGRAMMING

Python • Shell • Matlab • R  
 Stata • Mathematica • SQL • C++  
 Julia

### DATA SCIENCE LIBRARIES

Pytorch • Tensorflow • Pandas  
 Numpy • Sci-kit Learn • Matplotlib  
 Seaborn

### OTHERS

TeX • Linux • AWS • GCP  
 Wordpress

## EDUCATION

### STANFORD UNIVERSITY | SEP 2020 – JUN 2022 (EXPECTED)

Master of Science, Management Science & Engineering

- Cum. GPA: 4.123/4.000.
- Focus on computational social sciences and graph neural networks.

### UNIVERSITY OF TORONTO | SEP 2017 – JUN 2020

Honours Bachelor of Science (High Distinction), Economics & Mathematics

- Cum. GPA: 4.00/4.00, course average: 95%.
- Supervised by Stuart M. Turnbull (Finance) and Aloysius Siow (Economics).
- Top graduating student from Woodsworth college.
- Top graduating student from the department of economics.

### STANFORD UNIVERSITY | JUN 2019 – AUG 2019

Summer Session, Intensive Studies in Data Science

- Cum. GPA: 4.300/4.000.

## HONOURS

Nov 2020	Reza Satchu Award For Excellence In Economics <i>Awarded to the graduating Economics student with the highest cumulative GPA.</i>
Jun 2020	The Arthur M. Kruger Honours Scholarship <i>Awarded to the top graduating student from Woodsworth college.</i>
Jan 2020	Mcnab Undergraduate In-Course Scholarship
Oct 2019	Alexander Mackenzie Scholarship In Economics And Political Science
Jul 2019	Killam American Fund For International Exchange
2017-20	Dean's List Scholar (All Semesters at University of Toronto)

## RESEARCH AND ACTIVITIES

### RESEARCH STUDENT AT SNAP | SEP 2020 – PRESENT

Supervisor: Jure Leskovec, Mentor: Jiaxuan You

### RESEARCH STUDENT AT UNIV. OF TORONTO | APR – SEP 2020

Supervisor: Ashton Anderson

We are working on a project examining the causal relationship between players' performances and quitting behaviours from more than 260m chess game records by 30k players. We found aggregate-level behaviours were indeed driven by two distinct types of players.

### UNDERGRADUATE HONOURS THESIS | SEP 2019 – APR 2020

Supervisors: Stuart M. Turnbull and Aloysius Siow

This thesis focuses on the WTI crude oil market and predictive powers encoded in sentiments of news from major publishers. I designed a framework to quantify news sentiments and incorporate sentiments into forecasting models, such framework provides an estimation to the profitability of predicting the market from news data.

### TD ROTMAN FINHUB TDMDAL HACKATHON | FEB 2020

Finalist Group (Top 5)

In this project, we developed a dictionary based NLP process extracting information from transcripts of earning calls of S&P 500 companies, and predict stock price movement on the next trading day.