# Tianyang Li

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## LINKS

Website: www.l-ty.com
Github: github.com/litianyang0211

## COURSEWORK

### GRADUATE

(University of Oxford, in progress)
Network
Theory of Deep Learning
Statistical Machine Learning
Graphical Model
Algorithmic Foundation of Learning

(University of Toronto)
Stochastic Process (A+)
Method of Applied Statistics (A+)
Probabilistic Machine Learning (A+)
Statistical Computation (A+)

### UNDERGRADUATE

(University of Toronto)
Theory of Statistical Practice (A+)
Machine Learning (A+)
Method of Data Analysis (A+)
Probability (A+)
Econometrics (A+)
Intermediate Microeconomics (A+)
Intermediate Macroeconomics (A+)
Real Analysis (A+)
Chaos, Fractals and Dynamics (A+)
Abstract Mathematics (A)
Ordinary Differential Equation (A+)
Linear Algebra (A+)
Calculus (A+)

## SKILLS

### PROGRAMMING

Julia • Matlab • Octave
Python • R • Stata

### DATA SCIENCE LIBRARIES

Numpy • Pandas • PyTorch
Sci-kit Learn

### OTHERS

LaTeX

## EDUCATION

### UNIVERSITY OF OXFORD | Oct 2021 - Oct 2022 (Expected)

Master of Science, Mathematical Sciences

### UNIVERSITY OF TORONTO | Sep 2017 - Jun 2021

Honours Bachelor of Science (High Distinction), Statistics (Specialist) & Mathematics (Minor)

- Cum. GPA: 3.97/4.00, course average: 94%.

### PEKING UNIVERSITY | Jun 2019 - Jul 2019

Summer Exchange, Modern Machine Learning in Practice

## HONOURS

| | |
|---|---|
| Jun 2021 | Walter Neil Thompson McKay Scholarship |
| Dec 2020 | Faculty of Arts & Science Alumni & Friends Undergraduate Scholarship |
| Aug 2020 | Joseph Wesley MacCallum Scholarship |
| Dec 2018 | Samuel Beatty In-Course Scholarship |
| Nov 2018 | Lawrence and Sharen Ho International Scholarship |
| Oct 2018 | James Morrow Scholarship |
| 2017-20 | Dean's List Scholar (All Semesters at University of Toronto) |

## RESEARCH EXPERIENCE

### REAL-WORLD APPLICATION OF TRUE POSTERIOR APPROXIMATION | Mar 2020

We implemented a variant of the TrueSkill model using gradient-based stochastic variational inference, optimized the approximate posterior to estimate the true posterior with tennis match outcomes and analyzed the framework of athletes' skill sets.

### TD ROTMAN FINHUB TDMDAL HACKATHON | Feb 2020

Finalist Group (Top 5)
We developed a dictionary-based NLP platform to extract information from transcripts of earning calls of S&P 500 companies, and predict stock price fluctuation on the next trading day.

## TEACHING EXPERIENCE

**METHODS OF DATA ANALYSIS** | Tutor | Jan 2021 - Apr 2021

**THE PRACTICE OF STATISTICS** | Tutor | May 2020 - Dec 2020

**CALCULUS II** | Teaching Assistant | Jan 2019 - Apr 2019

**CALCULUS I** | Teaching Assistant | Sep 2018 - Dec 2018