

# Tianyang Li

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## LINKS

Website: [www.l-ty.com](http://www.l-ty.com)  
 Github: [github.com/litianyang0211](https://github.com/litianyang0211)

## COURSEWORK

### GRADUATE

(University of Oxford, in progress)  
 Theory of Deep Learning  
 Quantum Process and Computation  
 Graphical Model

(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+)  
 Intermediate Microeconomics (A+)  
 Intermediate Macroeconomics (A+)  
 Real Analysis (A+)  
 Chaos, Fractals and Dynamics (A+)  
 Ordinary Differential Equation (A+)  
 Linear Algebra (A+)  
 Calculus (A+)

## SKILLS

### PROGRAMMING

Julia • Matlab • Octave  
 Python • R • Stata

### DATA SCIENCE LIBRARIES

Numpy • Pandas • Sci-kit Learn  
 TensorFlow

### 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