

# Graduate Student at University of Oxford, Mathematical Sciences tianyang.li@linacre.ox.ac.uk

# 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 Simulation Method 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+)

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**

**ETEX** 

## **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 | | TEACHING ASSISTANT | SEP 2018 - DEC 2018