YUGUANG (ROGER) BAI

@ rogerbai92@gmail.com   📞 647-573-3158   ✉ 1805-110 Erskine Avenue   📍 Toronto, Ontario, Canada
🌐 https://roger-bai.github.io/personal-webpage/   roger-bai

EXPERIENCE

Course Instructor
University of Toronto

📅 January 2020 – Ongoing   📍 Toronto, ON

- Taught hundreds of students various topics in mathematics, particularly those in linear algebra
- Was in charge of an entire course for first- and second-year students
- Achieved an overall 4.4/5 course evaluation from students

Teacher's Assistant
University of Toronto

📅 September 2015 – Ongoing   📍 Toronto, ON

- Worked with and helped a variety of students in areas such as calculus, linear algebra, and MATLAB programming
- Debugged several students' code and helped them understand their own code

EDUCATION

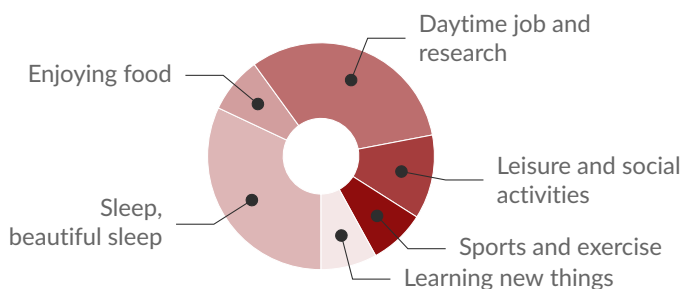### Ph.D. in Mathematics
University of Toronto

📅 Expected Summer 2021

Thesis title: Cluster Algebra Structure for Mirković-Vilonen Cycles and Polytopes

AWARDS

- Mathematics Graduate Program Award 2019
- Blyth Fellowship 2018
- Malcolm Slingsby Robertson Fellowship 2018
- University of Toronto Fellowship 2015 - 2020
- NSERC Undergraduate Research Award 2014, 2015

A DAY OF MY LIFE

Daytime job and research

Enjoying food

Leisure and social activities

Sleep, beautiful sleep

Sports and exercise

Learning new things

SPECIFIC INTERESTS

Badminton   Mystery novels   Logic puzzles   Machine Learning

Deep Learning   Classification Problems   Reinforcement Learning

LANGUAGES

Python   ●●●●○

MATLAB   ●●●●○

PACKAGES

Tensorflow   Keras   Pandas

PRESENTATIONS

The Geometric Satake Isomorphism
University of Toronto

📅 December 2019

Cluster Algebras and MV Cycles/Polytopes
Layola University Chicago

📅 November 2019

Derived Categories and its Applications to Sheaves
University of Toronto

📅 October 2018

Algebraic K-Theory of Group Scheme Actions
University of Toronto

📅 March 2018

Representations of Quivers and Auslander-Reiten Theory
University of Toronto

📅 October 2017

Hirzebruch-Riemann-Roch Theorem in Dimension One
University of Toronto

📅 September 2016