YUGUANG (ROGER) BAI

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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
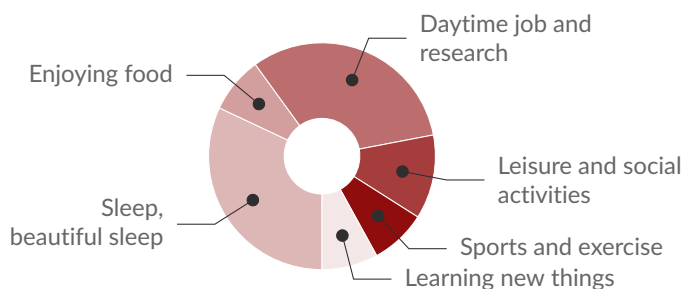**University of Toronto**

📅 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