YUGUANG (ROGER) BAI

rogerbai92@gmail.com | 647-573-3158 | Toronto, Ontario, Canada | roger-bai.github.io/personal-webpage/
roger-bai-404a061b4 | roger-bai

EXPERIENCE

Course Instructor
University of Toronto

Jan. 2020 – Ongoing | Toronto, ON

- Taught hundreds of students in various disciplines topics in mathematics, particularly those in linear algebra
- Was one of the first instructors to teach and be in charge of a course during the COVID-19 pandemic, laying the foundation and provided advice for future courses
- Achieved an overall 4.4/5 course evaluation from students

Teacher's Assistant
University of Toronto

Sept. 2015 – Dec. 2019 | 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 | Toronto, ON

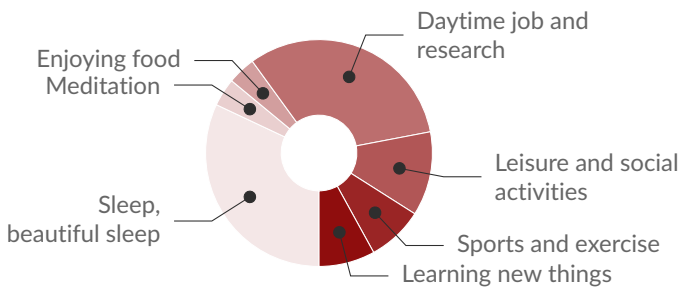
Thesis title: Cluster Algebra Structure for Mirković-Vilonen Cycles and Polytopes

Palette x Fields Accelerated Cybersecurity Training Program
Fields Institute

Nov. 2020 - Jan. 2021 | Toronto, ON

Learned a variety of topics such as
- Risk Management
- Cryptography
- Network Architecture

A DAY OF MY LIFE



LANGUAGES

- Python
- MATLAB
- SQL

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

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

SPECIFIC INTERESTS

Badminton | Mystery novels | Cybersecurity | Machine Learning | Reinforcement Learning