Joe Tran

Contact Information

Graduate Student, Mathematics and Statistics (PMath)   Email: joetran0@my.yorku.ca
Department of Mathematics and Statistics   Citizenship: Canadian
York University

Education

BSc. Mathematics for Education (09/2020-04/2024)
- Specialized Honours
- York University, Faculty of Science, Department of Mathematics and Statistics
- Cumulative Grade Point Average: 7.90/9.00 (Major 1 Grade Point Average: 8.04/9.00)

MA Mathematics and Statistics (Pure Mathematics) (09/2024-Present)
- York University, Faculty of Graduate Studies, Department of Mathematics and Statistics

Research Interests

Algebra, Topology, Functional Analysis, Measure Theory

Projects

1. *Singular Perturbation Theory Applied To Multi-Time Scale ODE Models: With Application to of Vector-Borne Diseases or Chemical-Reaction Models*, Summer Research Assistant, May 2024, J. Tran, W. A. Woldegerima (Supervisor)
2. *Investigating Solutions to Cubic and Quartic Equations*, Individual Reading Project, April 2024, J. Tran
3. *A Project in Group Theory: Classifying All Finite Groups up to Isomorphism*, Individual Project, December 2023, J. Tran
4. *The Distance From Rank r Projection Operators to the Nilpotent Operators on $\mathbb{C}^n$*, NSERC Undergraduate Summer Research Award, May 2023, J. Tran, M. Azeem, P. Skoufranis (Supervisor)
5. *Exploring the Wonders of Projective Geometry*, MATH 3052 Exploring Geometries Final Project, April 2023, J. Tran, G. Chen, J. S. Kang
6. *Predicting Wordle Results*, Mathematical Contest in Modelling, February 2023, J. Tran, G. Chen
7. *Spirographs*, MATH 3090 Computational Mathematics Final Project, November 2022, J. Tran, U. Pham, L. Xu, S. Dinh
8. *Average Localization Error*, MATH 3330 Regression Analysis Final Project, June 2022, J. Tran, L. Xu

Presentations & Conferences

- *Guest Speaker From York University: Q&A and Turning DNA Into Numbers*, Dr. Norman Bethune Collegiate Institute (Bethune Math Club), March 2024, 1 hour
- *The Distance From Rank r Projection Operators to the Nilpotent Operators on $\mathbb{C}^n$*, Faculty of Science Summer Research Conference 2023, August 2023, 10 min

Volunteer Service

Department of Mathematics and Statistics, York University
- Brunch at York Science (April 2024)
- Mathematics for Education Panelist at the *Ask Me Anything: Mathematics and Statistics Programs* Webinar Event (March 2024)
- Volunteer for the Fall Open House (November 2023)
- Member of the Tenure and Promotion Adjudicating Committee of the Pure Mathematics Section (September 2023-Present)
- Mathematics for Education Speaker at the Student Panel for Academic Orientation Day (August 2023)
- Event Coordinator for Club Infinity (May 2023-Present)
- Science Rendezvous (May 2023)
- Volunteer for the Spring Open House (March 2023)
- Note Taker for MATH 2131 Introduction to Statistics II (January 2022-April 2022)

Teaching Experience

Teaching Assistant at York University:
- Tutorial Leader for Mathematics I for the Biological and Health Sciences (MATH 1506)
  Summer 2024, Section A, Instructor: Carl Wolfe
- Tutorial Leader for Mathematics I for the Biological and Health Sciences (MATH 1506)
  Summer 2024, Section B, Instructor: Mohammed Reza Peyghami
- Tutor at the Math Help Center at York University
  Summer 2024
- Applied Calculus I (MATH 1013)
  Winter 2024, Section M, Instructor: Gordon Craig
- Applied Calculus I (MATH 1013)
  Winter 2024, Section N, Instructor: Saiful Zaman
- Applied Calculus II (MATH 1014)
  Winter 2024, Section T, Instructor: Mina Shafadeh
- Linear Algebra II (MATH 2022)
  Winter 2024, Section M, Instructor: Jessie Jihyeon Yang
- Applied Calculus I (MATH 1013)
  Fall 2023, Sections A and D Instructor: Amenda Chow
- Applied Linear Algebra (MATH 1025)
  Fall 2023, Section A Instructor: Safia Athar
- Tutorial Leader for Problems, Conjectures, and Proofs (MATH 1200)
  Fall 2023, Section A Instructor: Sooyeong Kim
- Applied Calculus II (MATH 1014)
  Summer 2023, Section B Instructor: Sirous Homayouni
- Linear Algebra I (MATH 1021)
  Summer 2023, Section A Instructor: Sergio Garcia Balan
- Differential Calculus with Applications (MATH 1300)
  Summer 2023, Section A Instructor: Md Abdur Rahman
- Business Mathematics I (MATH 1581)
  Summer 2023, Section A Instructor: Philip Morenz

Courses Tutored:

- Introduction to Applied Statistics (MATH 2565)
  Summer 2023
- Advanced Functions 12 (MHF4U)
  Fall 2023, Fall 2022, Fall 2021
- Calculus and Vectors 12 (MCV4U)
  Winter 2023
- Data Management 12 (MDM4U)
  Fall 2023, Winter 2023, Summer 2022
- Functions 11 (MCR3U)
  Fall 2023, Summer 2023, Winter 2023, Fall 2022, Summer 2022, Winter 2022, Fall 2021
- Functions and Applications 11 (MCF3M)
  Fall 2022
- Principles of Mathematics 10 (MPM2D)
  Fall 2023, Summer 2022, Winter 2022
- Physics 12 (SPH4U)
  Fall 2023
- Physics 11 (SPH3U)
  Fall 2023, Winter 2023, Fall 2022

Honours, Bursaries & Awards

- York University Undergrad Bursary (April 2024)
- York University Continuing Student Scholarship (February 2024)
- NSERC Undergraduate Student Research Award (May 2023-August 2023)
- Member of Dean's Honour Roll (April 2021, April 2023)
- Abe Karass/Donald Solitar Award (March 2023)
- Chair's Honour Roll in Mathematics and Statistics (November 2022)
- York University Continuing Student Scholarship (August 2022)
- York University Automatic Entrance Scholarship (August 2020)