DANIEL TARNU

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EDUCATION

PhD (with distinction), Simon Fraser University — Sep 2019 - Aug 2023
Mathematics – number theory and combinatorics

MSc, Western Washington University — Sep 2017 - Jun 2019
Mathematics – dynamical systems and ergodic theory

BSc, Western Washington University — Sep 2014 - Jun 2017
Mathematics

WORK EXPERIENCE

Private Tutor — June 2020 - Present

- Provided 1-on-1 math tutoring for number theory, linear algebra, and more.

Volunteer Tutor — Nov 2022 - July 2023
Native Education College — *Vancouver, BC, Canada*

- Provided 1-on-1 math tutoring for intermediate algebra, business math, and more.

Graduate Teaching Assistant — Sep 2019 - Jan 2023
Simon Fraser University — *Burnaby, BC, Canada*

- Tutored linear algebra, discrete math, precalculus, uni- and multivariate calculus, differential equations, and computer vision.

Graduate Instructor — Sep 2018 - June 2019
Western Washington University — *Bellingham, WA, USA*

- Acted as instructor and grader for intermediate algebra and business calculus.
- Collaboratively developed curricula.

PROGRAMMING SKILLS

Proficient in: Python, Rust, HTML/CSS/JS
Familiar with: C++, MATLAB

PUBLICATIONS & PREPRINTS

- D. Tarnu, *Classifying matrices with minimal joint spectral radius*, in preparation.
- S. Choi and D. Tarnu, *Limiting behavior of Rudin-Shapiro sequence autocorrelations*, in preparation.
- D. Tarnu, *On maximal autocorrelations of Rudin-Shapiro sequences*, Journal of Approximation Theory **287** (2023) article 105866.
- S. Choi and D. Tarnu, *The order of the fundamental solution of* $X^2 - DY^2 = 1$ *in* $\mathbb{Z}[\sqrt{D}]/\langle D\rangle$, Integers **22** (2022) article A84.
- S. Choi, P.C.H. Lam, and D. Tarnu, *Gap principle of divisibility sequences of polynomials*, Journal of Number Theory **223** (2021) 153-167.

ACCOLADES

Graduate Fellowship – Received Simon Fraser University's graduate fellowship in 2020 and 2022.

Travel and Research Award – Received travel and research grants from Simon Fraser University in 2021 and 2023.

Graduate Dean's Entrance Scholarship – Received nomination-only entrance scholarship from Simon Fraser University for 2019-2023.

Outstanding Graduate Student – Elected as the outstanding graduate student of the Western Washington University math department in 2019.

TALKS

An Introduction to Ergodic Theory May 2019 and Feb 2020
Western Washington University and Simon Fraser University

CONFERENCES ATTENDED

Joint Mathematics Meetings 2023 Jan 2023
Oregon Number Theory Days Nov 2019
Oregon State University
Pacific Northwest Number Theory Conference Mar 2019
University of British Columbia
Combinatorial Potlatch Nov 2017 and Nov 2018
University of Victoria and Simon Fraser University
Subannual: Quantum BC Seminar, SFU Number Theory & Algebraic Geometry Seminar, UBC Number Theory Seminar, WWU Mathematics Colloquium