DANIEL TARNU

daniel_tarnu@sfu.ca d-tarnu.github.io

EDUCATION

PhD (with distinction), Simon Fraser University

Mathematics – number theory and combinatorics

MSc, Western Washington University

Mathematics – dynamical systems and ergodic theory

BSc, Western Washington University

Mathematics

Sep 2019 - Aug 2023

Sep 2017 - Jun 2019

Sep 2014 - Jun 2017

Mathematics

WORK EXPERIENCE

Volunteer Tutor
Native Education College

Nov 2022 - Present
Vancouver, BC, Canada

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

Private Tutor

June 2020 - Present

• Provided 1-on-1 math tutoring for number theory, linear algebra, 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