

Vladislav Taranchuk

vladtar@udel.edu • <https://sites.udel.edu/vladtar/> • (916) 690 7540

EDUCATION

University of Delaware

Ph.D. in Mathematics

(Expected: 05/2023)

Advisor: Dr. Felix Lazebnik

Master of Science in Mathematics

(Graduated: 05/2020)

California State University, Sacramento (CSUS)

(Graduated: 05/2018)

Bachelor of Science in Mathematics

Minor in Computer Science

PUBLICATIONS

Submitted:

Himanshu Gupta and **Vladislav Taranchuk**. "On the Eigenvalues of the Graphs $D(5, q)$ " - [PDF](#)

Published:

Felix Lazebnik and **Vladislav Taranchuk**. "A New Family of Algebraically Defined Graphs with Small Automorphism Group", *Electronic Journal of Combinatorics*, 29 (1) 2022 - [PDF](#)

Vladislav Taranchuk, and Craig Timmons. "The anti-Ramsey problem for the Sidon equation." *Discrete Mathematics* 342.10 (2019): 2856-2866. - [PDF](#)

Thomas Blankenship, Jay Cummings, and **Vladislav Taranchuk**. "A new lower bound for van der Waerden numbers." *European Journal of Combinatorics* 69 (2018): 163-168. - [PDF](#)

Vladislav Taranchuk. "Pancyclicity when each cycle contains k chords." *Discussiones Mathematicae Graph Theory* 39 (2019) 867-879. - [PDF](#)

TEACHING EXPERIENCE

Instructor of Record

University of Delaware, Newark, DE

- Calculus I (Math 221) (Winter 2021, Summer II 2021)
- Discrete Math (Math 210) (Fall 2021)
- Elementary Linear Algebra (Math 349) (Spring 2022, Fall 2022)

Teaching Assistant

University of Delaware, Newark, DE

- Calculus I (Math 221) (Fall 2018)
- Analytic Geometry and Calculus A (Math 241) (Fall 2019)
- Analytic Geometry and Calculus B (Math 242) (Spring 2019, Spring 2020, Fall 2020)

Mathematics Tutor

(09/2016-05/2018)

Sacramento State University, Sacramento, CA

- Tutored students in College Algebra, Pre-Calculus, Calculus I, II, III, Linear Algebra, Discrete Mathematics.

RESEARCH AND AWARDS

- Summer Doctoral Fellowship, University of Delaware* (Summer 2022)
- Proved a family of graphs are close to being Ramanujan
- Baxter-Sloyer Teaching Award* (Summer 2022)
- Won the department wide teaching award for graduate students for my teaching through the year of 2021
- UNIDEL Scholar, University of Delaware* (Summer 2021)
- Studied algebraically defined graphs
- Summer Doctoral Fellowship, University of Delaware* (Summer 2020)
- Proved the existence of Pappus configurations in certain types of projective planes
- UNIDEL Scholar, University of Delaware* (Summer 2019)
- Studied the Turan number of even cycles
- Research course under Dr. Craig Timmons, Sacramento State University* (Spring 2018)
- Worked on the Anti-Ramsey Problem for the Sidon Equation
- McNair Scholar under Dr. Jay Cummings, Sacramento State University* (Fall 2016)
- Proved results regarding the Van der Waerden numbers
- SURE grant recipient under Dr. Craig Timmons, Sacramento State University* (Summer 2016)
- Research regarding pancyclic graphs

PRESENTATIONS

- | | | |
|--|-----------------------------------|-----------|
| <i>29th British Combinatorial Conference, Lancaster, UK</i> | (in-person talk) | (07/2022) |
| <i>Discrete Math Seminar, Open University, UK</i> | (in-person talk) | (07/2022) |
| <i>10th PhD Summer School, Rogla, Slovenia</i> | (in-person talk) | (07/2022) |
| <i>Discrete Math Seminar, Open University, UK</i> | (virtual talk) | (11/2021) |
| <i>Discrete Math Seminar, University of Delaware</i> | (virtual talk) | (10/2021) |
| <i>Graduate Student Seminar, University of Delaware</i> | (virtual talk) | (05/2021) |
| <i>Graduate Student Combinatorics Conference</i> | (virtual: video) | (05/2021) |
| <i>Eastern Sectional AMS Conference</i> | (paper presentation) | (09/2018) |
| <i>Mathematics Research Symposium</i> | (paper presentation) | (08/2018) |
| <i>Algebra, Number Theory and Combinatorics Seminar, CSUS</i> | (paper presentation) | (09/2017) |
| <i>McNair's Research Symposium, CSUS</i> | (paper presentation) | (05/2017) |
| <i>Algebra, Number Theory and Combinatorics Seminar, CSUS</i> | (paper presentation) | (02/2017) |
| <i>Provost Fall Research Symposium, CSUS</i> | (poster presentation) | (11/2016) |
| <i>Student Research Symposium, CSUS</i> | (poster presentation) | (10/2016) |

SKILLS AND CERTIFICATIONS

- Python for Everyone Specialization, Coursera* – [View Certificate](#)
- Python basics and syntax, Python Data Structures, Using Python to Access Web Data, Object-Oriented Programming and Using Databases in Python, Retrieving, Processing and Visualizing Data in Python

EXTRACURRICULAR ACTIVITIES

Volunteer Tutor at Serviam Girls Academy

(Fall 2021 – Spring 2022)

- Meet once a week for an hour to work on math homework with 5th grade student

AWM (Association for Women in Mathematics) Mentor

(Fall 2019, Fall 2020)

- Mentored incoming graduate students during their first year

Refereed a peer-reviewed journal submission

- European Journal of Combinatorics
- Electronic Journal of Combinatorics
- Bulletin of the Malaysian Mathematical Sciences

(October 2021)

(May 2022)

(May 2022)

GEMS Seminar Organizer

(Summer 2019)

- Helped with organizing a summer seminar designed for undergraduate and graduate students to learn about faculty research