# NATALIIA KUSHNERCHUK

Espoo, Finland

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#### **EDUCATION**

Aalto University

School of Science, Department of Mathematics and System Analysis, Doctoral degree

Aalto University

Espoo, Finland

School of Science, Mathematics and Operations Research, Master's degree

Saint Petersburg State University

Department of Mathematics and Computer Science, Mathematics, Bachelor's degree

2021 – 2023

Saint Petersburg, Russia

# WORK EXPERIENCE

Personal tutor 2017 - 2023

Personal tutor in mathematics for primary and junior high school students.

#### Teaching assistant at Aalto University

2022

Courses: First course in probability and statistics, Graph theory, Matrix algebra

### Research assistant at Aalto University

June 2022 - July 2023

Research assistance at Computer Science department was under supervision of Professor Parinya Chalermsook.

# Doctoral researcher at Aalto University

since August 2023

Doctoral studies at Mathematics and System Analysis department are under supervision of Professor Kaie Kubjas.

# RESEARCH

Research interests: Applied Algebraic Geometry, Algebraic Statistics, Combinatorics, Polyhedral Geometry.

#### INVITED TALKS

- January 2024, Finnish Mathematical Days, Espoo: Matroid Stratification of ML Degrees of Independence Models
- March 2024, Seminar in Applied CATS, KTH University: Matroid Stratification of ML Degrees of Independence Models
- April 2024, GSMAAC24, Berlin: Matroid Stratification of ML Degrees of Independence Models

#### SKILLS

- Programming skills: Python, MatLab, Macaulay2, Julia (beginner)
- Language skills: English (academic IELTS 7.5), Russian (native speaker), French (A1), Finnish (A1)

#### Extracurricular activities

- (since 2023) Volunteering as an English teacher in a project "Common" helping refugees learn the language.
- (2022) Volunteering at the student association "Women of Aalto" helping with organizing events.
- (since 2024) Vice-president of the student association "Women of Aalto".

## **PUBLICATIONS**

• With Oliver Clarke, Serkan Hosten, Janike Oldekop, Matroid Stratification of ML Degrees of Independence Models, preprint 2024, arXiv:2312.10010