# FEDOR GERASIMOV

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#### **EDUCATION**

Rice University
 PhD student, Mathematics. Advisor: Gregory R. Chambers
 Research Interests: Convex and Discrete Geometry, Convex Optimization, Topology

 Moscow Institute of Physics and Technology (MIPT)
 Sep 2019 – Jul 2023
 BSc in Applied Mathematics and Computer Science
 Department of Discrete Mathematics

 Yandex School of Data Analysis
 Sep 2022 – May 2023

• Yanaex School of Data Analysis
Russia's leading Data Analysis program curated by Yandex,
the biggest Russian IT company and 2<sup>nd</sup> largest Russian search engine

## WORK AND TEACHING EXPERIENCE

#### **AWARDS**

All-Russian National Olympiad in Mathematics
 Silver medal in the 11<sup>th</sup> grade (diploma)

 Moscow Mathematical Conference of High School Students
 Best Project Award (diploma and publication)

• Higher School of Economics Mathematical Olympiad Gold medals in the 10<sup>th</sup> and 11<sup>th</sup> grades (diploma and diploma)

Moscow Mathematical Olympiad
 Silver medals in the 10<sup>th</sup> and 11<sup>th</sup> grades (diploma)

Sep 2019, 2018

Feb 2018, 2019

#### **PUBLICATIONS**

• Andrey S. Shutov, Fedor V. Gerasimov, "On an Interesting Circle in a Triangle" (pdf), Dec 2019
Moscow Mathematical Conference of High School Students

## OTHER RESEARCH EXPERIENCE

• Bachelor's Thesis Work (honors)

Thesis title: Blocking Numbers of Convex Bodies (text in Russian)

Advisor: Alexander A. Polyanskii

Sep 2022 - Aug 2023

Last updated: August 11, 2025

• Research Experience for Undergraduates at MIPT
Worked on problems concerning maximum-sum matchings of points (link)

Jun 2021 – Aug 2021

Research advisor: Alexander A. Polyanskii

• Research Practicum for Sophomores

Sep 2020 - May 2021

Worked on problems related to the Bellows conjecture and Laman graphs

Found a new proof of the rigidity of Laman graphs using the theory of places (text in Russian)

Research advisor: Alexander A. Polyanskii

#### MATH PROGRAMS AND CONFERENCES

• SIAM TX - LA Conference
Presented a poster "Exploring Local Solution Manifolds of Nonlinear Least Squares Problems"

• International Conference on the Geometry and Topology of 3-Manifolds (link)

Sep 2022

Oct 2024

• Workshop on the Contemporary Problems of Applied Combinatorics Gave a talk about the modeling of an epidemic on a random graph Jun - Jul 2021

• School of Contemporary Mathematics (link)

Jul 2019, Jul 2020

• Preparation for the All-Russian National olympiad in Mathematics Two-week intensive problem-solving workshop for high school students held every season by the Moscow Center of Educational Excellence Jun 2016 - 2019

• Summer Maths Program at King's College, London A three-week lecture and problem-solving course Jul 2017

## **SKILLS**

## Languages:

• Russian (mother tongue), English (Proficient)

# Programming languages:

- Python, C++, R
- MATLAB, Wolfram Mathematica

## Other tools:

• Typesetting languages: LATEX, Markdown

• Optimization Tools: Gurobi

#### EXTRACURRICULAR ACTIVITIES

Rice Rowing Club

Jan 2024 – present

Competitive rowing team at Rice University

Rice ICPC Club

Aug 2023 - May 2024

Preparation for competitive programming contests

MIPT Basketball team Sep 2019 – May 2021

Point guard position

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