

ALAİTTİN KIRTIŞOĞLU

Applied Mathematics
Illinois Institute of Technology
Chicago, USA

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<https://kirtsoglu.github.io>

EDUCATION

Ph.D. in Applied Mathematics

Illinois Institute of Technology

Chicago, USA

2021 Aug–present

M.S. in Mathematics

Hacettepe University, Advisor: [Lale Özkahya](#)

Ankara, Turkey

2019–2021

– Thesis: “Variations of Star Coloring on Graphs”

B.S. Exchange Student

Lublin University of Technology

Lublin, Poland

Feb–July 2016

B.S. in Mathematics

Mustafa Kemal University, **In the first place**

Hatay, Turkey

2014–2018

EXPERIENCES

Fermi National Accelerator Laboratory (FERMILAB)

Intern in a Research Project

Batavia, USA

May 16 – July 22, 2022

– This full time internship is an education program administered by ORISE sponsored by NSF. We collaborate together with high energy physicists to help define methods and algorithms for locating and identifying particles trajectories in data obtained from state-of-the-art 3D detectors using graph theory and related machine learning techniques.

Illinois Institute of Technology

Teaching Assistant

Chicago, USA

2021 –Present

- MATH 350 Introduction to Computational Mathematics
- MATH 251 Multivariate and Vector Calculus
- MATH 333 Complex Analysis and Linear Algebra
- MATH 252 Differential Equations

Spring 2022

Spring 2022

Fall 2021

Fall 2021

TED University

Teaching Assistant

Ankara, Turkey

2019 –2021

- MATH 221 Linear Algebra I
- MATH 102 Multivariable Calculus
- MATH 203 Linear Algebra and Differential Equations
- MATH 101 Calculus of One Variable
- MATH 112 Introduction to Multivariable Calculus

Spring 2021

Spring 2020, Spring 2021

Spring 2020

Fall 2019, Fall 2020

Fall 2019, Spring 2020

PAPERS SUBMITTED TO JOURNALS

- [1] A. Kirtışoğlu and L. Özkahya, “Coloring of Graphs Avoiding Bicolored Paths of a Fixed Length, [\[arXiv\]](#) ”.

CONTRIBUTED TALKS

1. **British Combinatorial Conference (Online)** July 2021
“Coloring of Graphs Avoiding Bicolored Paths of a Fixed Length”
2. **SIAM Conferences on Discrete Mathematics (Online)** July 2021
“Coloring of Graphs Avoiding Bicolored Paths of a Fixed Length”
3. **European Combinatorial Conference (Online)** Sep 2021
“Coloring of Graphs Avoiding Bicolored Paths of a Fixed Length”

ORGANIZING

- **VI. Mathematics Meeting, Hacettepe University** Oct 2019
Student seminars series. The meeting is held at different universities each semester and five to six hundred students attend.
- **Home Seminars** Dec 2018–July 2019
Organized up to 20 math seminars in my home with 30 students studying at METU, Hacettepe and Bilkent Universities.
- **IV. Mathematics Meeting, Middle East Technical University** Oct 2018

PRESENTATIONS

1. VII. Mathematics Meeting, Boğaziçi University Feb 2020
“A Geometric Proof of the Infinity of Primes”
2. VI. Mathematics Meeting, Hacettepe University Oct 2019
“Acyclic and Star Colorings of Regular Graphs”
3. IV. Mathematics Meeting, Middle East Technical University Oct 2018
“Congruent Numbers and Elliptic Curves”
4. III. Mathematics Meeting, Galatasaray University Feb 2018
“The Game of Hex and Brouwer Fixed Point Theorem”

WORKSHOPS

- Metric Graph Theory, at [CIRM](#) in Marseille, France Dec 6–11 2021
- [Nesin Math Village](#) Summer and Winter Schools, Turkey 2015–2020
- [Cakilarasi Math Village](#) Summer Schools, Turkey 2017–2019
- Analysis and Algebra Summer School, [Turkish Mathematical Society](#) June 19–23, 2017
- Analysis Summer School, [Turkish Mathematical Society](#) July 11–22, 2016

SKILLS AND HOBBIES

- **Languages:** English, Turkish (Native)
- **Computer Skills:** Python, Matlab, Latex
- **Hobbies:** GO Player (1 dan)