

# ALAİTTİN KIRTIŞOĞLU

Department of Applied Mathematics  
Illinois Institute of Technology  
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<https://kirtsoglu.github.io>

## RESEARCH INTERESTS

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Extremal Graph Theory, Positional Games

## EDUCATION

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<b>Illinois Institute of Technology</b> Ph.D. in Applied Mathematics, Supervisor: Hemanshu Kaul	Chicago, USA 2021–present
<b>Hacettepe University</b> M.S. in Mathematics, GPA: 3.93/4.00, Supervisor: Lale Özkahya – Thesis: “Variations of Star Coloring on Graphs”	Ankara, Turkey 2019–2021
<b>Lublin University of Technology</b> Erasmus Exchange Student, Adviosor: Izolda Gorgol	Lublin, Poland Feb-June 2016
<b>Mustafa Kemal University</b> B.S. in Mathematics, GPA: 3.45/4.00, <b>In the first place</b> – Thesis: “The Game of Hex and Brouwer Fixed Point Theorem”	Hatay, Turkey 2014–2018

## TEACHING EXPERIENCE

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<b>Teaching Assistant/Recitation Instructor</b> <b>TED University</b>	Ankara, Turkey Sep 2019–Aug 2021
– Multivariable Calculus MATH 102 / Recitation	Spring 2021
– Linear Algebra I MATH 221 / Recitation	Spring 2021
– Calculus of One Variable MATH 101 / Recitation	Fall 2020
– Multivariable Calculus MATH 102 / Recitation	Spring 2020
– Introduction to Multivariable Calculus MATH 112 / Recitation	Spring 2020
– Linear Algebra and Differential Equation MATH 203 / Grading	Spring 2020
– Calculus of One Variable MATH 101 / Recitation	Fall 2019
– Introduction to Multivariable Calculus MATH 112 / Recitation	Fall 2019

## PAPERS SUBMITTED TO JOURNALS

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

## CONTRIBUTED TALKS

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1. British Combinatorial Conference	July, 2021
2. SIAM Conferences on Discrete Mathematics	July, 2021
3. European Combinatorial Conference	September, 2021

## ORGANIZING

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

## PRESENTATIONS

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

## WORKSHOPS

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- Arithmetic Winter School, Nesin Mathematics Village Jan 22–19 2019
- Various Topics in Graph Theory, Çakılları Mathematics Village Sep 10–15 2018
- Affine and Projective Geometry, Çakılları Mathematics Village Sep 3–8 2018
- Complex Analysis, Çakılları Mathematics Village Sep 3–8 2018
- Euclidean Geometry and Measure Theory, Çakılları Mathematics Village July 16–21 2018
- Undergrad-Grad Summer School, Nesin Mathematics Village July 15–August 31 2018
- Undergrad-Grad Winter School, Nesin Mathematics Village Jan 28–Feb 11 2018
- Random Matrices and Number Theory, Nesin Mathematics Village Jan 22–28 2018
- Undergrad-Grad Winter School, Nesin Mathematics Village Jan 15–21 2018
- Undergraduate-Graduate Summer School, Nesin Mathematics Village July 10–August 28 2017
- Analysis and Algebra Summer School, Turkish Math Society 19–23 June 2017
- Undergraduate-Graduate Summer School, Nesin Mathematics Village 23 July–29 August 2016
- Analysis Summer School, Turkish Math Society 11–22 July 2016
- Linear Algebra Workshop, Nesin Mathematics Village Jan 18–Feb 07 2016
- Undergraduate-Graduate Summer School, Nesin Mathematics Village July 13–August 31, 2015

Nesin Math Village: <https://nesinkoyleri.org/en/introduction-to-nesin-villages/>  
Çakılları Math Village: <https://www.cakilarasimatematikkoyu.com/>

## SKILLS

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- **Languages:** English, Turkish (Native)
- **Computer Skills:** Excel, Matlab, Latex