

MEHMET KIRTIŞOĞLU

RESEARCH INTEREST

- Interested in topological data analysis, algebraic (computational) topology; simplicial complexes and order complex, simplicial homology, persistent homology, and homotopy and the fundamental group.
- Worked on dynamics on complex networks and time series analysis by using tools from the fields of dynamical systems, statistical and computational physics, big data analysis and machine learning.

EDUCATION

Bilkent University

B.S. in Mathematics, Expected CGPA: 3.10/4.00

Ankara, Turkey

2017–2022

- Senior Project: “Reconstruction of Networks of Chaotic Systems”, Advisor: [Fatihcan Atay](#)

Hatay Science High School

High School Student, GPA: 91.93/100

Hatay, Turkey

2013–2017

TAKEN COURSES

- **In B.S.:** Abstract Mathematics I-II, Calculus I-II, Advanced Calculus I-II, Linear Algebra I-II, Differential Equations, Finite and Discrete Mathematics, Complex Analysis, Algebra I-II, Topology, Topics in Ordinary Differential Equations, Probability and Statistics for Engineers, Graduate Algebra I, Introduction to Number Theory, Real Analysis, Representation Theory, Introduction to Modeling and Optimization, Introduction to Programming in Python

ACADEMIC EXPERIENCE

Network Oriented Dynamics and Data Science Research Group ([NODDS](#)) Internship

Istanbul, Turkey

2020 Nov –Present

- Worked on Graph Theory, Stability Theory, Synchronization Theory, Pinning Theory, and Bifurcation Theory and executed hundreds of related simulations in Python.

Bilkent University

Grading Assistant

Ankara, Turkey

2019 Sep –2020 Jan

- MATH 220 Linear Algebra

SCHOLARSHIPS AND AWARDS

2017-2022	Outstanding Success Scholarship by Turkish Educational Foundation
2017-2022	National Undergraduate Scholarship Program (2205) by TÜBİTAK (The Scientific and Technological Research Council of Turkey)
2017-2022	Comprehensive Scholarship of Bilkent University
2017	Ranked in first 5000 in Nationwide University Entrance Exam (LYS) among 2 million high school students in Turkey
2017	Ranked in first 5000 in Nationwide University Entrance Exam (YGS) among 2 million high school students in Turkey

CONTRIBUTED TALKS

1. **Network Oriented Dynamics and Data Science Research Group** Jul 2021
“Generalized Synchronization of Chaos”
2. **Bahar Mathematics Meeting VI** October 2019
“An Algebraic Topological Proof of the Fundamental Theorem of Algebra”
3. **Bahar Mathematics Meeting IV** October 2018
“An Introduction to Modern Geometry (Inversion)”

ORGANIZING

- **IV. Mathematics Meeting, Middle East Technical University** Oct 2019
Student seminars series. The meeting is held at different universities each semester and five to six hundred students attend.
- **V. Mathematics Meeting, Hacettepe University** March 2019
- **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.
- **VI. Mathematics Meeting, Istanbul Bilgi University** Oct 2018

WORKSHOPS

- [Nesin Math Village](#) Summer and Winter Schools, Turkey 2016–2021
- [Cakilarasi Math Village](#) Summer Schools, Turkey 2018

VOLUNTEERING

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| Social Awareness Projects | Ankara, Turkey |
| School Teacher | Aug 2020 –Jun 2021 |
| Bahar Mathematics Meeting | Turkey |
| Web Designer | Jul 2018 –Nov 2019 |

SKILLS AND HOBBIES

- **Languages:** English (Fluent), Turkish (Native), German (A2.1)
- **Computer Skills:** Python, CPLEX, LaTeX
- **Hobbies:** Playing Saz, GO (Weichi), Chess, Fitness