

RESEARCH INTEREST

- Interested in algebraic (computational) topology; homotopy, cohomology, and homology of nerve spaces, group actions on topological spaces and category theory.
- Also interested in topological data analysis (TDA); Persistent Homology.

EDUCATION

Bilkent University MSc. in Mathematics – Research Area: Algebraic Topology “Cohomology of Categories”, Advisor: Ergün Yalçın	Ankara, Turkey 2022–2024
Bilkent University B.S. in Mathematics, CGPA: 3.10/4.00 – Senior Project: “Reconstruction of Networks of Chaotic Systems”, Advisor: Fatihcan Atay	Ankara, Turkey 2017–2022
Hatay Science High School High School Student, GPA: 91.93/100	Hatay, Turkey 2013–2017

TAKEN COURSES

- **In M.S.:** Group Representations, Manifold Theory, Reel Analysis, Introduction to Quantum Computation, Algebra II, Algebraic Topology I
- **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

Bilkent University Graduate Assistantship – Introduction to Calculus I, Introduction to Calculus II, Introduction to Linear Algebra, Topology	Ankara, Turkey 2022 Sep –Present
Network Oriented Dynamics and Data Science Research Group (NODDS) Internship – Worked on Graph Theory, Stability Theory, Synchronization Theory, Pinning Theory, and Bifurcation Theory and executed hundreds of related simulations in Python.	Istanbul, Turkey 2020 Nov –2022 May
Bilkent University Grading Assistant – MATH 220 Linear Algebra	Ankara, Turkey 2019 Sep –2020 Jan

WORKSHOPS

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| • Nesin Math Village Summer and Winter Schools, Turkey | 2016–2021 |
| • Cakilarasi Math Village Summer Schools, Turkey | 2018, 2023 |

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 4000 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

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| 1. Bilkent Math Graduate Seminars
<i>"Simplicial Quantum Contextuality"</i> | December 2022 |
| 2. DRP Turkey Symposium
<i>"Seifert Van Kampen Theorem and Its Applications"</i> | Aug 2022 |
| 3. Network Oriented Dynamics and Data Science Research Group
<i>"Generalized Synchronization of Chaos"</i> | Jul 2021 |
| 4. Bahar Mathematics Meeting VI
<i>"An Algebraic Topological Proof of the Fundamental Theorem of Algebra"</i> | October 2019 |
| 5. Bahar Mathematics Meeting IV
<i>"An Introduction to Modern Geometry (Inversion)"</i> | October 2018 |

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

VOLUNTEERING

Bilkent University Animal Friends Society	Ankara, Turkey Aug 2022 –June 2023
Social Awareness Projects School Teacher	Ankara, Turkey Aug 2020 –Jun 2021

SKILLS AND HOBBIES

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