

Education

Ph.D Computer Science and Engineering
Advisor: Esra Erdem
Expected graduation: 2026

Sabanci University

MSc. Mathematics
Advisor: Ergün Yalçın

Bilkent University

BSc. Mathematics

Bilkent University

Publications

1. Manuscript on explanation generation in matching problems, under double-blind review, 2025.
2. M. Fidan and E. Erdem. Finding Personalized Good-Enough Solutions to Unsatisfiable Stable Roommates Problems. *Theory and Practice of Logic Programming*. Accepted for publication, 2025.
3. P. Cabalar, E. Erdem, M. Fidan, and B. Muñiz. A preliminary taxonomy of explanations in problem solving. In *Book of Abstracts of European Symposium on Computational Intelligence and Mathematics*, pages 50-51, 2024
4. M. Fidan and E. Erdem. Knowledge-based stable roommates problem: A real-world application. *Theory and Practice of Logic Programming*, 21(6):852–869, 2021. doi: 10.1017/S1471068421000302
5. E. Erdem, M. Fidan, D. Manlove, and P. Prosser. A general framework for stable roommates problems using answer set programming. *Theory and Practice of Logic Programming*, 20(6):911–925, 2020. doi: 10.1017/S1471068420000277

Presentations

1. Knowledge-Based Stable Roommates Problems. Doctoral Consortium at ECAI 2024
2. Explanations for Stable Roommates Problem. Presented at HTNT 2024
3. Müge Fidan and Esra Erdem: Knowledge-based stable roommates problem: A real-world application. Paper Presented at ACLAI 2023
4. Esra Erdem, Müge Fidan, David Manlove and Patrick Prosser: A General Framework for Stable Roommates Problems using Answer Set Programming. Paper Presented at FLoC 2022
5. Müge Fidan and Esra Erdem: Knowledge-based stable roommates problem: A real-world application. Paper Presented at ICLP 2021
6. Esra Erdem, Müge Fidan, David Manlove and Patrick Prosser: A General Framework for Stable Roommates Problems using Answer Set Programming. Paper Presented at ICLP 2020
7. A General Framework for Stable Roommate Problems: A Preliminary Report. Poster Presentation at MATCH-UP 2019

Awards

1. First Place in the LP/CP Programming Contest 2020
Teammate: Aysu Bogatarkan

Conferences and Workshops

1. ECAI 2024: 27th European Conference on Artificial Intelligence (2024)
2. HTNT 2024: Here and There, Now and Then (2024)
3. ACLAI 2023: Challenges and Adequacy Conditions for Logics in the New Age of Artificial Intelligence (2023)
4. KR 2021: 18th International Conference on Principles of Knowledge Representation and Reasoning (2021)
5. ICLP 2021: 37th International Conference on Logic Programming (2021)
6. ICLP 2020: 36th International Conference on Logic Programming (2020)
7. MATCH-UP Conference: 5th International Workshop on Matching Under Preferences (2019)

Teaching Experience

Instructor, Sabanci University

- CS201, Programming Fundamentals (Spring 2025)

Undergraduate Research Project Co-Supervisor, Sabanci University

- Who gets what? – Solving matching problems using AI methods
Co-Supervisors: Esra Erdem, Baturay Yilmaz (Spring 2024–Fall 2024)

Senior Project Co-Supervisor, Sabanci University

1. Who gets what? – Solving matching problems using AI methods
Co-Supervisors: Esra Erdem, Baturay Yilmaz (Fall 2023–Spring 2025)

Freshman Project Co-Supervisor, Sabanci University

1. A journey into the past of AI (Fall 2022)
Co-Supervisors: Esra Erdem, Aysu Bogatarkan
2. AI4PUZZLES (Spring 2020)
Co-Supervisors: Esra Erdem, Aysu Bogatarkan

Teaching Assistant, Sabanci University

1. CS404, Artificial Intelligence (Fall 2021, Spring 2023, Spring 2024, Fall 2024)
2. CS301, Algorithms (Fall 2023)
3. CS201, Introduction to Computing (Spring 2021, Spring 2022, Fall 2022)
4. IF100, Computational Approaches to Problem Solving (Spring 2019–Fall 2020)
5. MATH 203, Introduction to Probability (Fall 2018)