

Ahoora Tamizifar

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EDUCATION

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| University of Illinois Chicago Ph.D. in Mathematics | Chicago, IL August 2025 – Present |
| University of California, Irvine Bachelor of Science in Mathematics, Minor in Statistics Cum Laude, Math Department Honors, Deans Honor List (9 quarters) | Irvine, CA September 2020 – March 2025 |

AWARDS

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| Outstanding Senior Award; UC Irvine Math Department | June 2025 |
| Graduate Research Fellowship Program - Honorable Mention; National Science Foundation | April 2025 |
| Advancing Inclusive Excellence Award; UC Irvine School of Physical Sciences | February 2024 |

RESEARCH EXPERIENCE

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| REU in Geometry and Topology at UCLA <i>Researcher</i> Mentors: Mason Porter, Sarah Tymochko, Sidhanth Raman | Los Angeles, CA August 2024 – September 2024 |
| <ul style="list-style-type: none">Selected as one of five students for an NSF-funded research program in topological data analysis at UCLA.Collaborated with peers to analyze mathematics faculty hiring patterns using persistent homology and data from the Mathematics Genealogy Project, comparing these patterns by gender to identify discrepancies.Implemented persistent homology algorithms in Python and Julia to generate persistence diagrams.Dedicated 40 hours per week to the project and presented findings to mentors weekly.Report available on the UCLA Mathematics website. | |

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| SoCal Data Science Fellowship <i>Research Fellow</i> Mentors: Babak Shahbaba, Sam Behseta, Jessica Jaynes, Roberto Pelayo, Mine Dogucu | Irvine, CA June 2023 – August 2023 |
| <ul style="list-style-type: none">Selected as one of five UC Irvine students for an NSF-funded research program with CSUF and Cypress College.Collaborated with peers to predict California's energy consumption by fuel type and sector for the next 10 years, analyzing public data on energy consumption and prices, population, and precipitation dating back to the 1960s.Developed and implemented time-series models in R to forecast energy consumption.Dedicated 35 hours per week to the project and presented findings to mentors weekly.Report available on the arXiv. | |

PRESENTATIONS

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| UIC Dynamics or Geometry Graduate Seminar; Chicago, IL - <i>Ergodic Theorems and Mixing</i> | August 2025 |
| JMM PME Contributed Sessions on Research by Undergraduates; Seattle, WA - <i>Exploring Patterns in Mathematics Faculty Hiring with Persistent Homology</i> | January 2025 |
| UCLA Geometry and Topology REU Seminar; Los Angeles, CA - <i>Exploring Patterns in Mathematics Faculty Hiring with Persistent Homology</i> | September 2024 |
| UC Irvine Directed Reading Program; Irvine, CA - <i>Classification of Compact Connected Surfaces</i> | March 2024 |
| UC Irvine MATH 195W Presentations; Irvine, CA - <i>What is Category Theory Anyway?</i> | December 2023 |
| CSUF Summer Research Symposium (Poster Presentation); Fullerton, CA - <i>Predicting Energy Consumption in California</i> | August 2023 |
| SoCal Data Science Fellowship Symposium (Poster Presentation); Irvine, CA - <i>Predicting Energy Consumption in California</i> | August 2023 |

LEADERSHIP EXPERIENCE

Undergraduate Mathematics Committee (UMC)

Advisor

Irvine, CA

June 2024 – June 2025

- Served as an advisor to guide the UMC in events and initiatives and to support the transition to new leadership.

Co-President

June 2023 – June 2024

- Organized weekly professional and social events, including graduate student and industry panels, faculty research and career talks, and academic advising workshops, which drew an average of 40 students per event.
- Secured a study lounge in the math department building dedicated to undergraduate students, and received a \$500 Advancing Inclusive Excellence Award from the School of Physical Sciences to improve the lounge.
- Coordinated UC Irvine's first-ever Integration Bee, writing a challenging qualifying exam and selecting integrals for the main competition, which featured 16 participants and over 30 attendees.

TEACHING EXPERIENCE

UIC Department of Mathematics, Statistics, and Computer Science

Chicago, IL

Teaching Assistant

- MATH 180: Calculus I (Fall 2025)

UC Irvine Department of Mathematics

Irvine, CA

Learning Assistant

- MATH 13: Introduction to Abstract Mathematics (Spring 2023, Fall 2023)

SKILLS

Programming: R, Python, Julia, MATLAB, Mathematica, LaTeX

Languages: Farsi (Native Speaker), English (Bilingual Proficiency)