

Ahoora Tamizifar

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EDUCATION

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

GRANTS AND AWARDS

NSF Graduate Research Fellowship

2026 – 2031

Outstanding Senior Award, UC Irvine Department of Mathematics

June 2025

NSF Graduate Research Fellowship Program - Honorable Mention

April 2025

Advancing Inclusive Excellence Award, UC Irvine School of Physical Sciences

February 2024

RESEARCH EXPERIENCE

REU in Geometry and Topology at UCLA

Researcher

Los Angeles, CA

August 2024 – September 2024

Mentors: Mason Porter, Sarah Tymochko, Sidhanth Raman

- 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](#).

SoCal Data Science Fellowship

Research Fellow

Irvine, CA

June 2023 – August 2023

Mentors: Babak Shahbaba, Sam Behseta, Jessica Jaynes, Roberto Pelayo, Mine Dogucu

- 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

UIC Dynamics or Geometry Graduate Seminar; Chicago, IL

February 2026

- *Introduction to Entropy*

UIC Dynamics or Geometry Graduate Seminar; Chicago, IL

August 2025

- *Ergodic Theorems and Mixing*

JMM PME Contributed Sessions on Research by Undergraduates; Seattle, WA

January 2025

- *Exploring Patterns in Mathematics Faculty Hiring with Persistent Homology*

UCLA Geometry and Topology REU Seminar; Los Angeles, CA

September 2024

- *Exploring Patterns in Mathematics Faculty Hiring with Persistent Homology*

UC Irvine Directed Reading Program; Irvine, CA

March 2024

- *Classification of Compact Connected Surfaces*

UC Irvine MATH 195W Presentations; Irvine, CA

December 2023

- *What is Category Theory Anyway?*

CSUF Summer Research Symposium (Poster Presentation); Fullerton, CA

August 2023

- *Predicting Energy Consumption in California*

SoCal Data Science Fellowship Symposium (Poster Presentation); Irvine, CA

August 2023

- *Predicting Energy Consumption in California*

LEADERSHIP EXPERIENCE

Undergraduate Mathematics Committee (UMC)

Irvine, CA

Advisor

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 181: Calculus II (Spring 2026)
- 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)