

Ahoora Tamizifar

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EDUCATION

University of Illinois Chicago (UIC)

Ph.D. in Mathematics

Chicago, IL

August 2025 – Present

University of California, Irvine (UCI)

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

Outstanding Senior Award; UCI Math Department

June 2025

Graduate Research Fellowship Program - Honorable Mention; National Science Foundation

April 2025

Advancing Inclusive Excellence Award; UCI School of Physical Sciences

February 2024

RESEARCH EXPERIENCE

Geometry and Topology REU 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 UCI 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

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*

UCI Directed Reading Program; Irvine, CA

March 2024

- *Classification of Compact Connected Surfaces*

UCI 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
<i>Advisor</i>	June 2024 – June 2025
<i>Co-President</i>	June 2023 – June 2024
<ul style="list-style-type: none">• Spearheaded the organization of weekly professional and social events, including graduate student and industry panels, faculty research and career talks, and academic advising workshops.• Attracted an average of 40 students per event during the 2023–2024 academic year, significantly boosting engagement in the UCI Math community.• 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 undergraduate mathematics study lounge.• Coordinated UCI’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.• Served as an advisor for the 2024–2025 academic year to guide the UMC in events and initiatives, foster continuity, and assist with the transition to new leadership within the organization.	

TEACHING EXPERIENCE

UIC Department of Mathematics, Statistics, and Computer Science	Chicago, IL
<i>Teaching Assistant</i>	
<ul style="list-style-type: none">• MATH 180: Calculus I (Fall 2025)	
UCI Department of Mathematics	Irvine, CA
<i>Learning Assistant</i>	
<ul style="list-style-type: none">• MATH 13: Intro to Abstract Math (Spring 2023, Fall 2023)	

SKILLS

Programming: R, Python, Julia, MATLAB, Mathematica, LaTeX
Languages: Farsi (Native Speaker), English (Bilingual Proficiency)