Parsa Rangriz

EDUCATION

University of California, San Diego
PhD in Mathematics (Expected Starting: Sep 2025)

University of Waterloo
MMath in Statistics (Sep 2023 - Apr 2025)
- Advisor: Prof. Aukosh Jagannath
- Thesis: *High-Dimensional Scaling Limits of SGD in Single-Index Models*

Sharif University of Technology
BSc in Physics (Sep 2018 - Feb 2023)
- Minor in Mathematics

INTERESTS

- Probability Theory
- High-Dimensional Statistics
- Stochastic Analysis
- Random Matrix Theory
- Mathematical Physics
- Statistical Physics

RESEARCH EXPERIENCES

Graduate Research Student
University of Waterloo (Sep 2023 - Apr 2025)
- Supervisor: Prof. Aukosh Jagannath
- Project: *High-Dimensional Scaling Limits of SGD in Single-Index Models*

Summer Research Intern
EPFL (July 2022 - Sep 2022)
- Supervisor: Prof. Lenka Zdeborova
- Project: *Assortative Partitions on Dense Random Graphs*

HONORS AND AWARDS

University of Waterloo Graduate Scholarship, 2025

Graduate Research Studentship, University of Waterloo, 2023-2025

International Master's Award of Excellence, University of Waterloo, 2023

MMath Entrance Scholarship, University of Waterloo, 2023

Summer@EPFL Fellowship, EPFL, 2022

Ranked 5th the 26th Iran University Physics Olympiad, Sanjesh Org., 2021

Silver Medal in the 30th Iran National Physics Olympiad, Sampad Org., 2017

SUMMER SCHOOLS

CRM-PIMS Summer School in Probability, University of Montreal, Canada, 2024

Quantum Thermodynamics Summer School, ETH Zurich, Switzerland, 2021

TEACHING EXPERIENCES

Teaching Assistant, University of Waterloo (2023-2025)
- STAT 333: Stochastic Processes 1 (Winter 2025, Winter 2024)
- STAT 833: Stochastic Processes 2 (Fall 2024)
- STAT 330: Mathematical Statistics (Spring 2024, Fall 2023)
- STAT 231: Probability (Spring 2024)
- STAT 230: Statistics (Spring 2024)
- STAT 202: Introductory Statistics for Scientists (Fall 2023)

Teaching Assistant, Sharif University of Technology (2019-2022)
- Thermodynamics and Statistical Mechanics 3 (Fall 2022, Fall 2021, Spring 2021)
- Thermodynamics and Statistical Mechanics 2 (Spring 2021)
- Thermodynamics and Statistical Mechanics 1 (Fall 2020)
- General Physics 3 (Fall 2019)
- Fundamentals of C Programming (Fall 2019)

SKILLS

Programming: Experienced in C and Python
Libraries: Familiar with Scikit-Learn, Keras, and TensorFlow
Tools: Experienced in Wolfram Mathematica and LaTeX
Languages: English (C1), Turkish (Fluent), Azerbaijani and Persian (Native)