

# Parsa Rangriz

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CONTACT INFORMATION	Department of Mathematics, University of California, San Diego, 9500 Gilman Drive #0112 La Jolla, CA, USA, 92093-0112 Office: HSS 4047	prangriz@ucsd.edu <a href="https://www.rangriz.com">https://www.rangriz.com</a>
EDUCATION	<b>University of California, San Diego</b> (Sep 2025 - Present) Ph.D. in Mathematics <b>University of Waterloo</b> (Sep 2023 - Apr 2025) M.Sc. in Statistics ( <i>Advisor:</i> Aukosh Jagannath) <b>Sharif University of Technology</b> (Sep 2018 - Feb 2023) B.Sc. in Physics w/ Minor in Mathematics	
INTERESTS	<b>Probability &amp; High-Dimensional Statistics:</b> stochastic analysis, random matrices, learning theory, statistical physics, combinatorial optimization.	
PUBLICATIONS	2. P. Rangriz, <b>Limit theorems for stochastic gradient descent in high-dimensional single-layer networks</b> , arXiv:2511.02258 (Nov 2025) 1. P. Rangriz, <b>High-dimensional scaling limits of online stochastic gradient descent in single-index models</b> , M.Sc. Thesis, University of Waterloo (Apr 2025)	
RESEARCH EXPERIENCES	<b>Graduate Research Student</b> University of Waterloo (Sep 2023 - Apr 2025) Supervisor: Aukosh Jagannath <b>Research Intern – Summer@EPFL</b> Statistical Physics of Computation Lab, EPFL (July 2022 - Sep 2022) Supervisor: Lenka Zdeborova	
AWARDS & HONORS	<b>Department of Mathematics Fellowship</b> , UC San Diego, 2025 <b>UW Graduate Scholarship</b> , University of Waterloo, 2025 <b>Graduate Research Studentship</b> , University of Waterloo, 2023-2025 <b>International Master's Award of Excellence</b> , University of Waterloo, 2023 <b>Master of Mathematics Entrance Scholarship</b> , University of Waterloo, 2023 <b>Summer@EPFL Fellowship</b> , EPFL, 2022 <b>Silver Medal in the 30th Iran National Physics Olympiad</b> , 2017	
TA EXPERIENCES	<b>UC San Diego</b> (2025-Present) MATH 11: Calculus-Based Probability and Statistics (Fall 2025) <b>University of Waterloo</b> (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) <b>Sharif University of Technology</b> (2019-2022) Advanced Statistical Mechanics (Fall 2022, Fall 2021, Spring 2021), Statistical Mechanics (Spring 2021), Thermodynamics (Fall 2020), General Physics 3 (Fall 2019), Fundamentals of C Programming (Fall 2019)	