

Parsa Rangriz

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 https://www.rangriz.com
EDUCATION	University of California, San Diego (Sep 2025 - Present) Ph.D. in Mathematics University of Waterloo (Sep 2023 - Apr 2025) MMath in Statistics (<i>Advisor</i> : Aukosh Jagannath) Sharif University of Technology (Sep 2018 - Feb 2023) B.Sc. in Physics & Minor in Mathematics	
INTERESTS	Probability and High-Dimensional Statistics : Stochastic Analysis, Random Matrices, Learning Theory, Statistical Physics, Combinatorial Optimization.	
PUBLICATIONS	P. Rangriz, Limit theorems for stochastic gradient descent in high-dimensional single-layer networks , arXiv:2511.02258 (Nov 2025) P. Rangriz, High-dimensional scaling limits of online stochastic gradient descent in single-index models , MMath Thesis, University of Waterloo (Apr 2025)	
RESEARCH EXPERIENCE	Graduate Research Student University of Waterloo (Sep 2023 - Apr 2025) <i>Supervisor</i> : Aukosh Jagannath Research Intern – Summer@EPFL Statistical Physics of Computation Lab, EPFL (July 2022 - Sep 2022) <i>Supervisor</i> : Lenka Zdeborova	
AWARDS & HONORS	Department of Mathematics Fellowship , UC San Diego, 2025 UW Graduate Scholarship , University of Waterloo, 2025 Graduate Research Studentship , University of Waterloo, 2023-2025 International Master’s Award of Excellence , University of Waterloo, 2023 Master of Mathematics Entrance Scholarship , University of Waterloo, 2023 Summer@EPFL Fellowship , EPFL, 2022 Silver Medal in the 30th Iran National Physics Olympiad , 2017	
TEACHING ASSISTANT EXPERIENCE	UC San Diego (2025-Present) MATH 20B: Calculus 2 (Winter ’26), MATH 11: Probability and Statistics (Fall ’25) University of Waterloo (2023-2025) STAT 333: Stochastic Processes 1 (Winter ’25, Winter ’24), STAT 833: Stochastic Processes 2 (Fall ’24), STAT 330: Mathematical Statistics (Spring ’24, Fall ’23), STAT 231: Probability (Spring ’24), STAT 230: Statistics (Spring ’24), STAT 202: Introductory Statistics for Scientists (Fall ’23) Sharif University of Technology (2019-2022) Advanced Statistical Mechanics (Fall ’22, Fall ’21, Spring ’21), Statistical Mechanics (Spring ’21), Thermodynamics (Fall ’20), General Physics 3 (Fall ’19), Fundamentals of C Programming (Fall ’19)	