

# 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) MMath in Statistics ( <i>Advisor:</i> Aukosh Jagannath) <b>Sharif University of Technology</b> (Sep 2018 - Feb 2023) B.Sc. in Physics & Minor in Mathematics	
INTERESTS	<b>Probability and High-Dimensional Statistics:</b> Stochastic Analysis, Random Matrices, Learning Theory, Statistical Physics, Combinatorial Optimization.	
PUBLICATIONS	P. Rangriz, <b>Limit theorems for stochastic gradient descent in high-dimensional single-layer networks</b> , arXiv:2511.02258 (Nov 2025) P. Rangriz, <b>High-dimensional scaling limits of online stochastic gradient descent in single-index models</b> , MMath Thesis, University of Waterloo (Apr 2025)	
RESEARCH EXPERIENCE	<b>Graduate Research Student</b> University of Waterloo (Sep 2023 - Apr 2025) <i>Supervisor:</i> Aukosh Jagannath <b>Research Intern – Summer@EPFL</b> Statistical Physics of Computation Lab, EPFL (July 2022 - Sep 2022) <i>Supervisor:</i> 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	
TEACHING ASSISTANT EXPERIENCE	<b>UC San Diego</b> (2025-Present) MATH 20B: Calculus 2 (Winter '26), MATH 11: Probability and Statistics (Fall '25) <b>University of Waterloo</b> (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) <b>Sharif University of Technology</b> (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)	