

Statistics Seminar

Friday, February 2, 12:00 pm - 1:00 pm Derr 325 and Zoom

Kernel: A Bridge Between Linearity and Nonlinearity.

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Abstract: Kernel methods play a vital role in many machine learning and statistical problems. The first part of the presentation will provide a gentle introduction to what a kernel matrix/function is, along with some applications in different fields. The second part will focus on analyzing the performance of kernel ridge regression estimators, an extension of regular ridge regression estimators, under low-dimensional and high-dimensional regimes. Some simulation results will also be demonstrated.

Bio: Dr. Shen is an Assistant Professor at the Department of Mathematics, Texas State University. He received his Ph.D. in Statistics from Michigan State University in 2019. His research focusing on developing novel statistical methodologies in detecting associations between genetic variants and phenotypes.