

Tensor Learning in 2020s: Methodology, Theory, and Applications



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The analysis of tensor data, i.e., arrays with multiple directions, has become an active research topic in the era of big data. Datasets in the form of tensors arise from a wide range of scientific applications. Tensor methods also provide unique perspectives to many high-dimensional problems, where the observations are not necessarily tensors. Problems in high-dimensional tensors generally possess distinct characteristics that pose great challenges to the data science community.

In this talk, we discuss several recent advances in tensor learning and their applications in computational imaging and microbiome studies. We also illustrate how we develop statistically optimal methods and computationally efficient algorithms that interact with the modern theories of computation, high-dimensional statistics, and non-convex optimization.

Thursday, March 9, 2023, 3:30-4:30 PM Eastern

133 Rosenau Hall

Virtual using link and info below.

<https://unc.zoom.us/j/91249030964?pwd=UXloTWIHajdQbkRqd1d5TnRaMitYdz09>

Meeting ID: 912 4903 0964

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