

Trustworthy Machine Learning and Reasoning Group



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Date: 24 February 2023 (Friday)



Time: 10:00 – 11:00 (HKT)



Zoom: <https://meeting.tencent.com/dm/Eo4huPRT4dka>

From early-learning to memorization: robust learning via training dynamic



ABSTRACT

When machines learn from noisy data, they often struggle to accurately generalize and may instead memorize incorrect information. However, during the initial stages of training, correct information can still be inferred before this memorization occurs. This phenomenon is known as early learning. In this talk, I will explore the concepts of early learning and memorization across a variety of tasks, ranging from learning with noisy supervision to dealing with spurious correlations. Additionally, I will demonstrate how the features learned at the end of supervised learning often exhibit a phenomenon called neural collapse, which can have significant impacts on transfer learning methods for downstream tasks.



BIOGRAPHY

I am a Ph.D. candidate in the Center for Data Science at New York University. My research interests lie in the general area of machine learning, particularly in robust deep learning with imperfect datasets (corrupted data, limited supervision, small data, etc.) as well as their applications in medicine such as Alzheimer's automatic detection. I am also a member of the Math and Data (MAD) group at NYU where I work on inverse problems and optimization. Out of school, I love playing tennis, scuba diving, surfing and any water sports.

ENQUIRY

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