

Mathematical Sciences Colloquium

Recent advancements of scientific computing in deep learning



Professor

Young-jun Hong

Sungkyunkwan University

March 10, 2022 16:00 - 17:15

Zoom https://unist-kr.zoom.us/j/87540455917



Host

Professor Chang-Yeol Jung

cjung@unist.ac.kr

Abstract

This lecture explores a list of topics and areas that have led my research in computational mathematics and deep learning in recent years. Numerical approaches in computational science are crucial for understanding real-world phenomena, and deep neural networks have achieved state-of-the-art performance in a variety of fields. The exponential growth and the extreme success of deep learning and scientific computing have seen application across a multitude of disciplines. In this lecture, I will focus on recent advancements of scientific computing and deep learning such as adversarial examples, nanophotonics, and numerical PDEs.