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Title: High Performance Computing and Machine Learning

High Performance Computing (HPC) and Machine Learning (ML) are two areas that have witnessed tremendous growth and have revolutionized the field of computing. The combination of HPC and ML can lead to significant improvements in computational speed and accuracy, making it possible to handle complex datasets and solve problems that were previously thought to be unmanageable. This presentation focuses on the application of ML tools such as Sklearn, Pytorch, and Tensorflow in the domain of HPC. These tools are widely used by data scientists, machine learning engineers and researchers to build, implement and deploy ML models for various applications such as recommender systems, medical image recognition systems, cybersecurity systems, etc. Moreover, these tools provide a wide range of functionalities, including data pre-processing, feature engineering, hyper-parameter tuning, model training, testing and prediction. Furthermore, the use of these tools has enabled researchers to achieve state-of-the-art results in several domains, including computer vision, natural language processing, and scientific simulations. In conclusion, using ML tools such as Sklearn, Pytorch, and Tensorflow provides their users with the ability of fast prototyping and rapid delivery of various solutions in the realm of ML and HPC.