

Deep Learning Reconstruction in the NOvA Experiment

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The NOvA experiment is a long-baseline accelerator neutrino experiment. It uses the upgraded NuMI beam from Fermilab and measures electron neutrino appearance and muon neutrino disappearance at its Far Detector in Ash River, Minnesota. NOvA is the first neutrino experiment that implemented convolutional neural networks in event reconstruction. NOvA is also developing new deep-learning algorithms to improve performance and robustness for future analyses. In this talk, I will discuss the development of deep learning techniques at NOvA.

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