

Beginner Tutorial Group 5

Branden Aitken, Xunuy Liang, and Tianyi Xie

June 17, 2025

Importance of Features

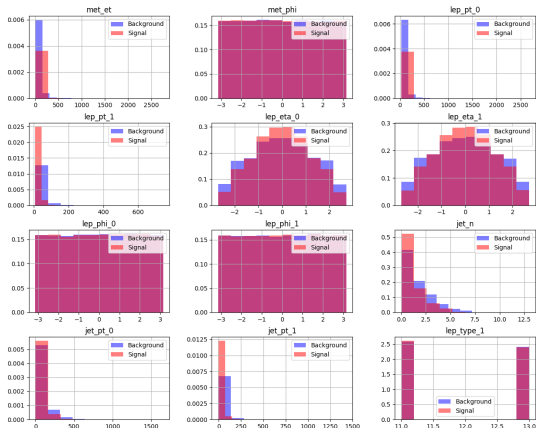


Figure: The distribution of background and signal features.

An Unintuitive Result

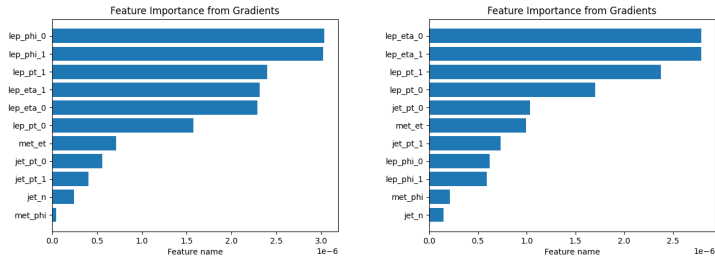


Figure: Learning rate is increased by factor of ten on the right figure from 0.001 to 0.01.

Using a Boosted Decision Tree

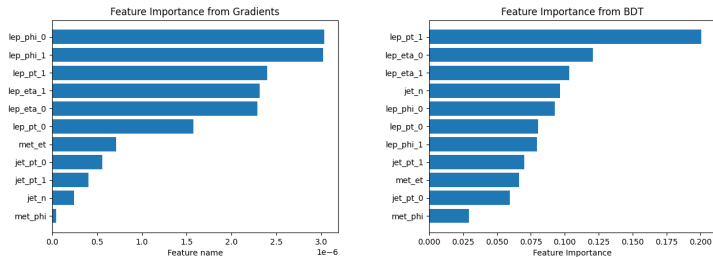


Figure: Showing MLP vs BDT networks.

Using a Boosted Decision Tree

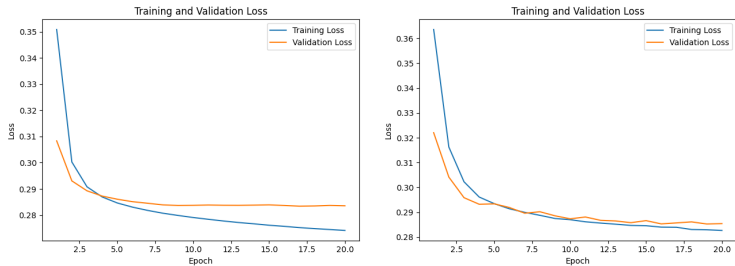


Figure: The right figure uses dropout layers.