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Training Deep Learning Models on Many-Core Processors

Leveraging on our previous work on developing DNN-based classification models for Higss events [1], we turn to CNN-based classification models for muon events. Using Intel Knights Landing (KNL) processors, we present performance metrics on training convolutional neural networks (CNNs) on multiple KNL computing nodes for the task of muon identification (i.e "high Pt" or "low Pt"). This work is an improvement over previous similarly tasked workload of using deep neural networks (DNNs) for higgs identification (i.e. "higgs" or "background").

Intended contribution length

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