

Title: Accelerating Sparse Deep Neural Networks using GPUs.

The goal of the project is to perform neural network inference on sparse deep neural networks. You are required to improve the performance of Sparse DNN using GPUs.

This project is a problem of graph challenge competition:

<https://graphchallenge.mit.edu/challenges> (First challenge)

The details of the problem statement are given at:

<http://graphchallenge.mit.edu/sites/default/files/documents/SparseDNN-GraphChallenge-2019-09-01.pdf>

Links:

<https://arxiv.org/abs/1909.05631>

References:

1. A GPU Implementation of the Sparse Deep Neural Network Graph Challenge
<https://ieeexplore.ieee.org/document/8916223>
2. Accelerating DNN Inference with GraphBLAS and the GPU
<https://ieeexplore.ieee.org/document/8916498>
3. Performance of Training Sparse Deep Neural Networks on GPUs
<https://ieeexplore.ieee.org/document/8916506>
4. At-Scale Sparse Deep Neural Network Inference With Efficient GPU Implementation
<https://arxiv.org/abs/2007.14152>