

Normalizing Flows

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Code is found at <https://github.com/axel-ponten/advanced-deep-learning-VT25/tree/main/gnn-icecube>

I implemented a GNN with three layers with $k=3$ nearest neighbors. I used early stopping with patience 10 and learning rate of $1e-3$, and all predictions are done with the GNN of the lowest test loss.

The total number of trainable parameters was only roughly 10k. The final results show some bias in the y position, the predictions have a peak not seen in the true spectrum. This might be due to the fact that I by mistake normalized train, test and val input data separately instead of using the mean and std of the train for the normalization of the other two.