

random search with sweeps and nnconv

adam_mse_nnconv_poolMaxAggr_2fc_wandb_random

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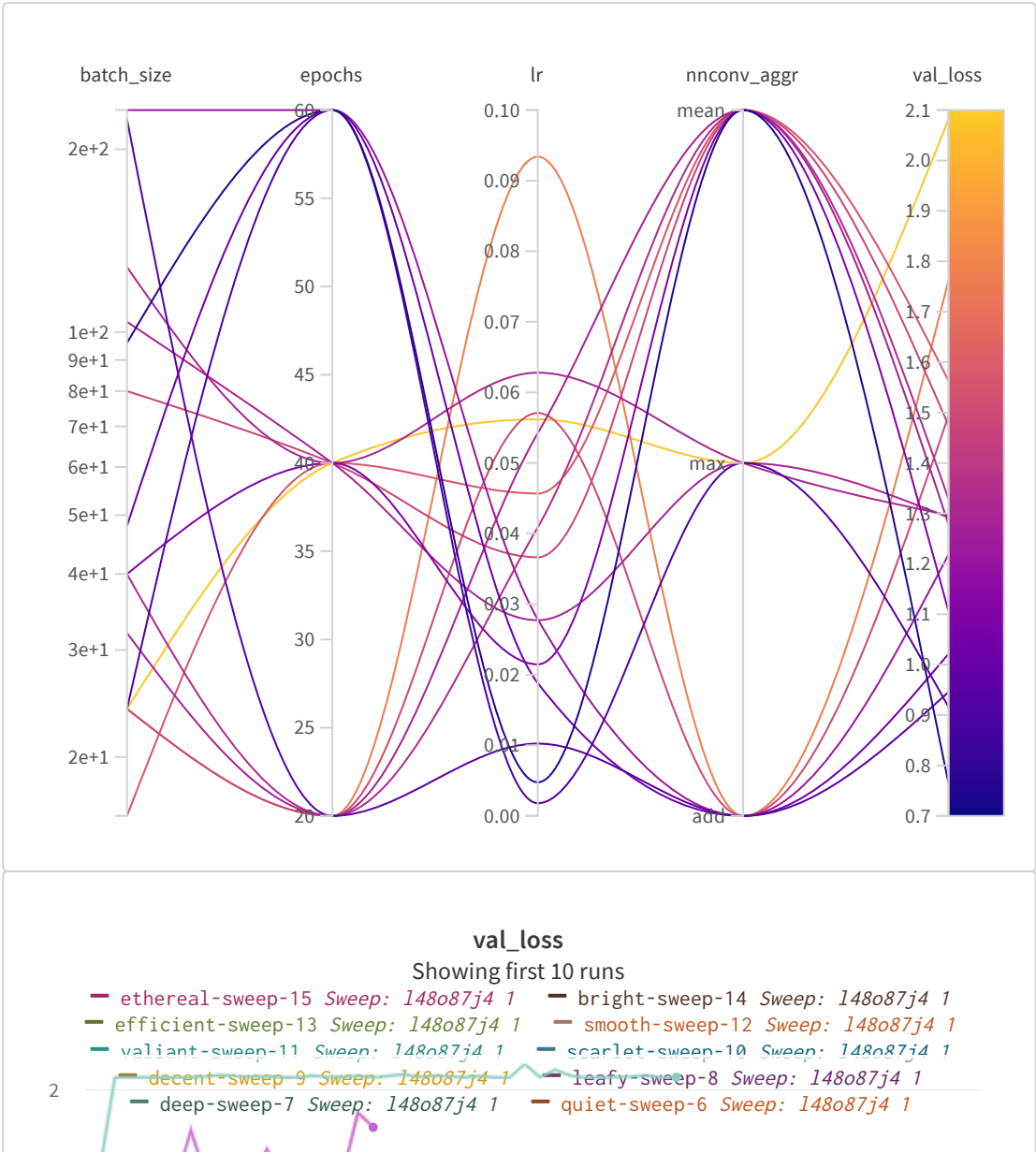
```
# Define the GNN model
class GNNModel(nn.Module):
    def __init__(self, in_channels, hidden_dim_1, hidden_dim_2, hidden_dim_3, out_channels):
        super(GNNModel, self).__init__()
        #nn - A neural network that maps edge features edge_attr of
        nn1 = nn.Sequential(nn.Linear(5, 128), ReLU(), nn.Linear(128, hidden_dim_2))
        self.conv1 = NNConv(in_channels, hidden_dim_1, nn1, aggr=correlation_aggr)
        self.global_pool = aggr.MaxAggregation()
        self.fc1 = nn.Linear(hidden_dim_1, hidden_dim_3)
        self.fc2 = nn.Linear(hidden_dim_3, out_channels)

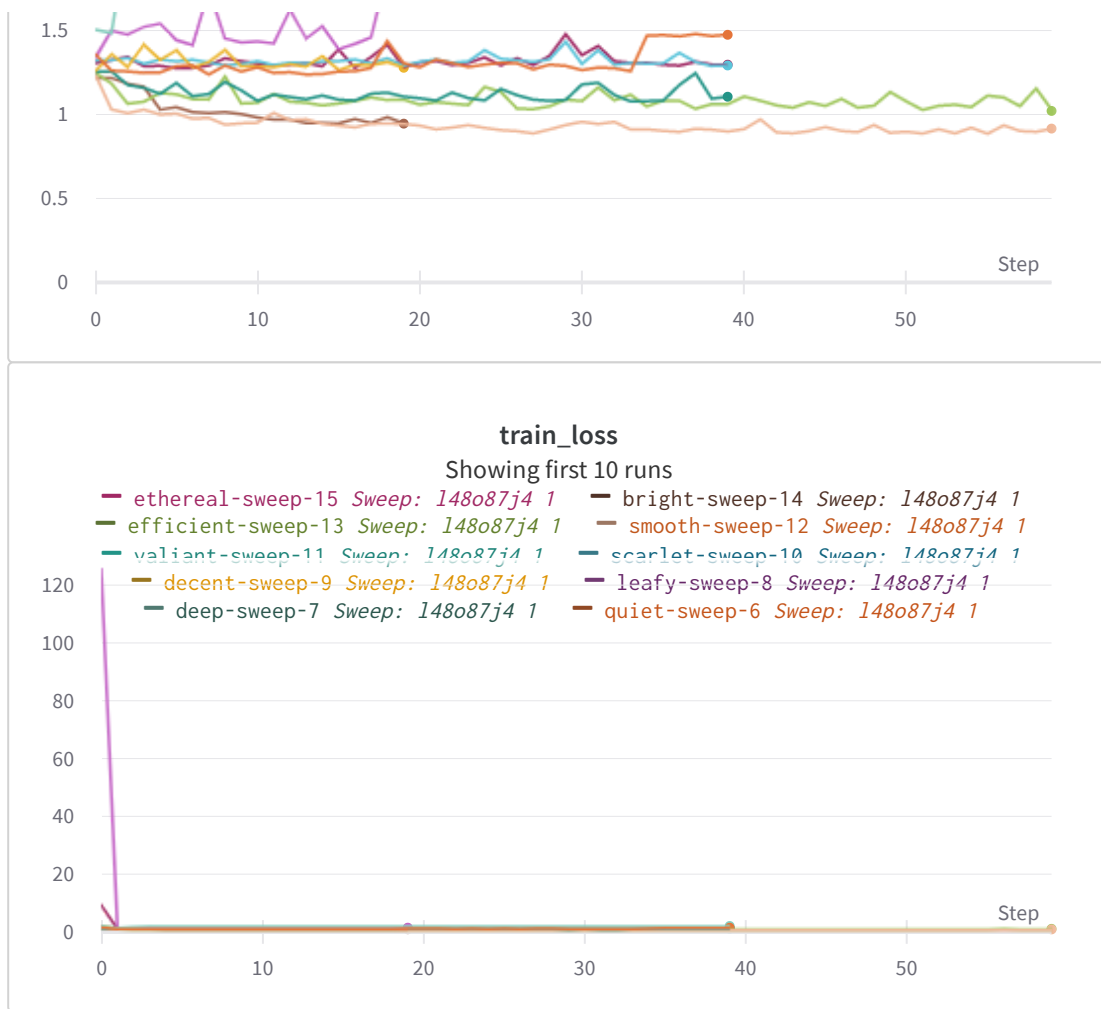
    def forward(self, data):
        x, edge_index, edge_attr, batch = data.x, data.edge_index, data.edge_attr, data.batch
        x = self.conv1(x, edge_index, edge_attr).relu()
        #x = global_mean_pool(x, batch) # size = [batch_size, hidden_dim_1]
        x = self.global_pool(x, batch)
        x = self.fc1(x).relu()
        x = self.fc2(x)
        return x

sweep_configuration = {
    'method': 'random',
    'metric': {'goal': 'minimize', 'name': 'val_loss'},
    'parameters': {'batch_size': {'distribution': 'q_log_uniform_values',
                                   'max': 256,
                                   'min': 16,
                                   'q': 8},
                   'criterion': {'value': 'MSELoss()'},
                   'epochs': {'values': [20, 40, 60]},
```

```
}  
  
    'hidden_dim_1': {'value': 64},  
    'hidden_dim_2': {'value': 128},  
    'hidden_dim_3': {'value': 32},  
    'in_channels': {'value': 11},  
    'lr': {'distribution': 'uniform',  
          'max': 0.1,  
          'min': 0},  
    'optimizer': {'value': 'adam'},  
    'out_channels': {'value': 1}  
}
```

Visualizations





Created with ❤️ on Weights & Biases.

https://wandb.ai/ntuwb/adam_mse_nnconv_poolMaxAggr_2fc_wandb_random_new/reports/random-search-with-sweeps-and-nnconv--VmIldzo0NDQwMTI0