Dynamic Meta-Learning Layer (DML)

The DML layer introduces real-time weight adjustment during inference using a hypernetwork that generates delta weights based on input context.

Features

- Lightweight hypernetwork
- Sparsity masking for novelty
- Real-time adaptation to tasks

Architecture

```
class DMLLayer(nn.Module):
def init(self, d_model=768, sparsity_ratio=0.3):
super().init()
self.hypernet = nn.Sequential(
nn.Linear(d_model, 16),
nn.GELU(),
nn.Linear(16, d_model * d_model)
)
self.sparsity_ratio = sparsity_ratio
self.scale = 0.1
```