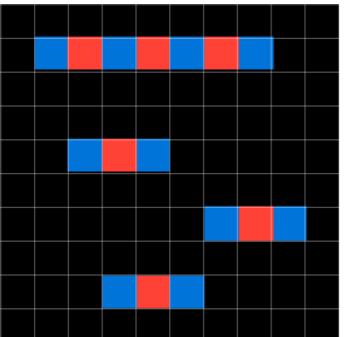
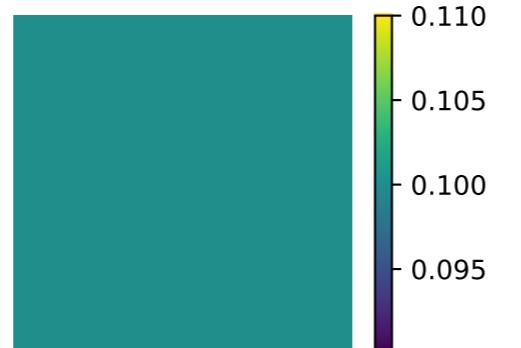


CNN Feature Analysis: Grid 10×10

Original Input



One-Hot Embedding
10 channels



Grid Size: 10×10 | CNN: 3 conv layers | Hidden Dim: 128

Layer Statistics:

EMBED: Ch=10, Size=(10, 10), Mean=0.100±0.249, Range=[0.00,1.00]
Diversity=0.2808, Sparsity=0.900, Entropy=0.85

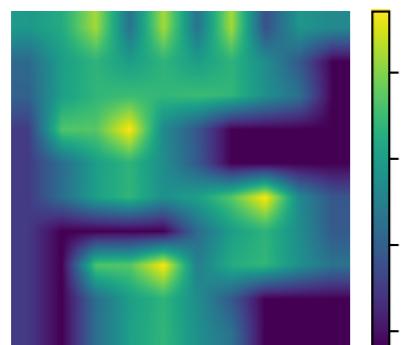
CONV1: Ch=32, Size=(10, 10), Mean=0.470±0.193, Range=[0.00,4.52]
Diversity=0.6314, Sparsity=0.542, Entropy=3.44

CONV2: Ch=32, Size=(10, 10), Mean=0.311±0.168, Range=[0.00,4.09]
Diversity=0.7065, Sparsity=0.630, Entropy=3.28

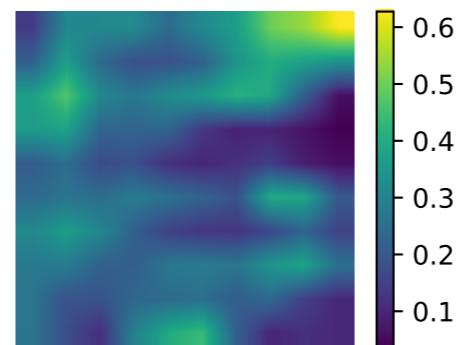
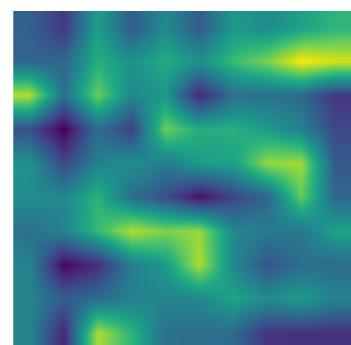
CONV3: Ch=32, Size=(10, 10), Mean=0.248±0.195, Range=[0.00,3.15]
Diversity=0.5538, Sparsity=0.569, Entropy=3.37

SPATIAL_FEATURES: Ch=32, Size=(10, 10), Mean=0.248±0.195, Range=[0.00,3.15]
Diversity=0.5538, Sparsity=0.569, Entropy=3.37

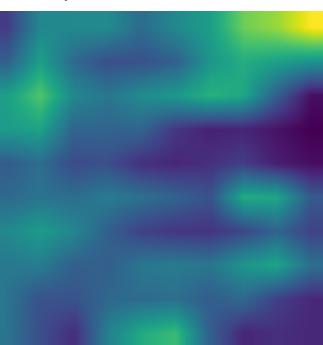
CONV1 Average
1 channels



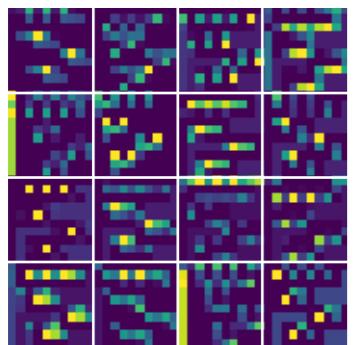
CONV2 Average
1 channels



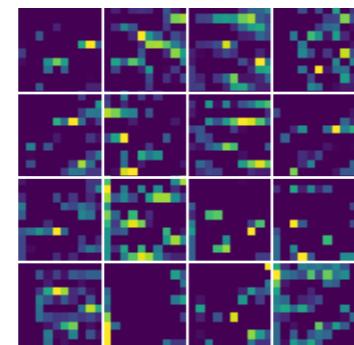
Spatial Features (avg)
→ Input to Slot Attention



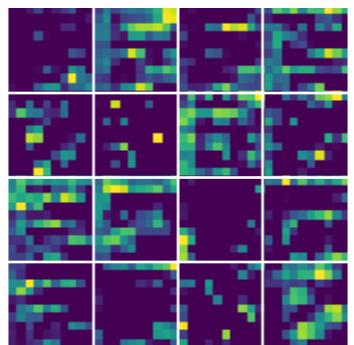
Feature Channels (showing 16/32)



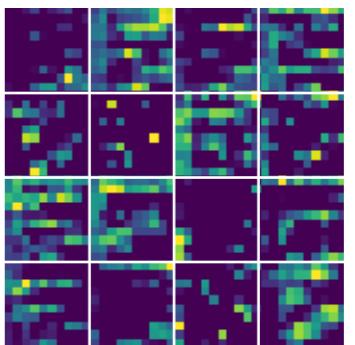
Feature Channels (showing 16/32)



Feature Channels (showing 16/32)



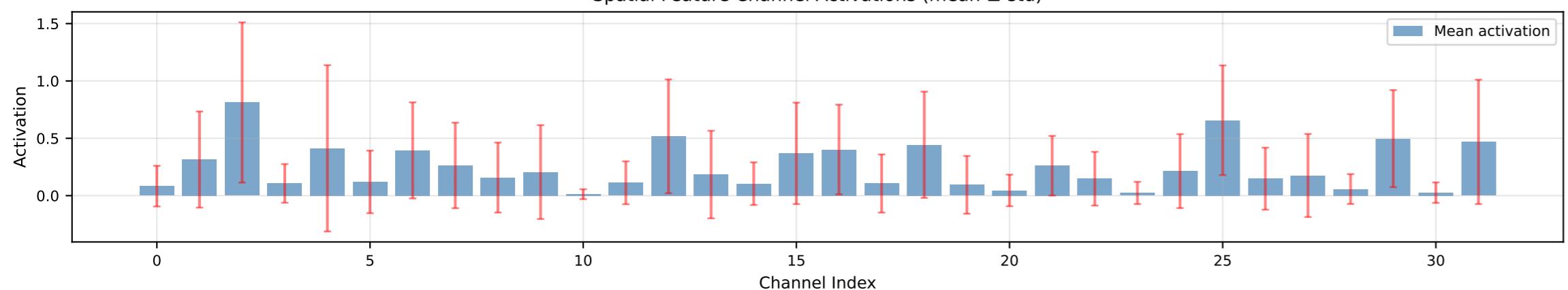
Feature Channels (showing 16/32)



DIAGNOSIS SUMMARY:

- GOOD DIVERSITY
- HIGH SPARSITY: Many dead neurons
- GOOD ENTROPY

Spatial Feature Channel Activations (mean ± std)



Spatial Location Similarity
(sample of 50 locations)

