

Vertex Computation Complexity

High

GaAN

SSE

$$O((f + d_{in}) * d_{out})$$

GraphSAGE-LSTM

GGNN

$$O(d_{in} * d_{out})$$

12 parameters

Low

$$O(1)$$

$$O(d_{in})$$

$$O(d_{in} * d_{out})$$

$$O(K * d_{in} * d_{out})$$

Edge
Computation
Complexity

GraphSAGE-Mean
Neural FPs

AGCN

GCN

$$O(d_{in} * d_{out})$$

1 parameter

GAT

High

ChebNet

$$O(d_{out})$$

GraphSAGE-pool

$$O(1)$$

Low