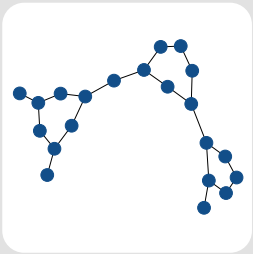
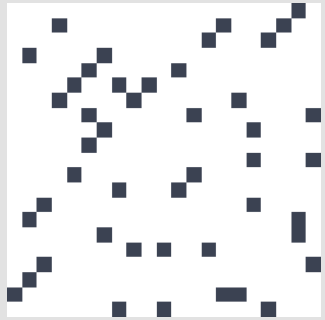
Standard generation

Training



Canonical ordering (e.g. BFS, DFS)

$A \in N \times N$

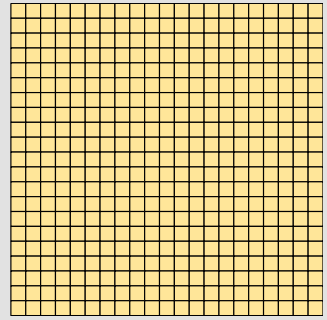


Sampling

f_θ

Autoregressive or one-shot

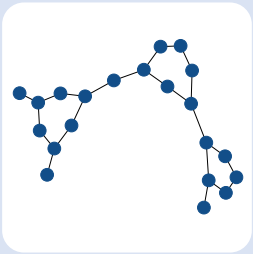
output $\in N \times N$



Time complexity: $\mathcal{O}(N^2)$
Output space: $\mathcal{O}(N^2)$

Bandwidth-constrained generation

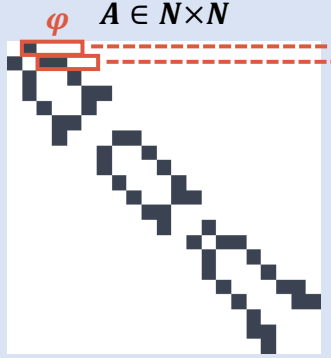
Training



Cuthill–McKee algorithm

Ordering reducing $\max_{(v_i,v_j)\in\mathcal{E}} dist(v_i, v_j)$

φ $A \in N \times N$



$A_{\text{opt}} \in N \times \varphi$

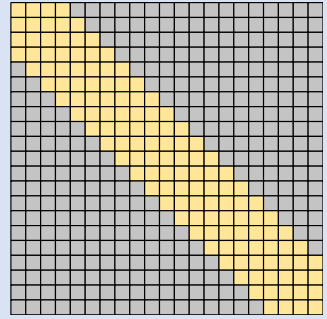
Flatten

Sampling

f_θ

Autoregressive or one-shot

output $\in N \times \varphi$



Time complexity: $\mathcal{O}(\varphi N)$
Output space: $\mathcal{O}(\varphi N)$

Output space No generation