

For  $i = 1, \dots, N$

Compute  $v_i$  as a function of  $\text{Pa}(v_i)$

$$\overline{v_N} = 1$$

For  $i = N - 1, \dots, 1$

$$\overline{v_i} = \sum_{j \in \text{Ch}(v_i)} \overline{v_j} \frac{\partial v_j}{\partial v_i}$$