

Start

Dataset  $\mathcal{D}$

It is a 3D-array of dimensions  $(V \times T \times S)$ . Here,  $V =$  number of genes,  $T =$  number of time points in each time series,  $S =$  number of time series.

Compute the Mutual Information (MI) matrix, denoted by  $\mathcal{M}$ . It is a  $(V \times V)$  matrix. The  $(v_i, v_j)^{th}$  cell of  $\mathcal{M}$ , denoted by  $\mathcal{M}(v_i, v_j)$ , represents the estimated MI value between  $v_i$  and  $v_j$ .

Initialize  $\mathcal{G} \leftarrow$  a null graph over  $(V \times T)$  nodes.

$\mathcal{G}_{\text{CLR}} \leftarrow \text{CLR}(\mathcal{D}, \mathcal{M})$  (Algorithm 2, main paper).

Set  $p \leftarrow 1$

