$$E\_LSCM = \sum_{T} A_T \|M_T v_T - \begin{bmatrix} 0 & -1 \\ 1 & 0 \end{bmatrix} M_T u_T\|_2^2$$

where

- $v_i \in \mathbb{R}^3$

- $u_i \in \mathbb{R}^3$

- $M_i \in \mathbb{R}^{2 \times 3}$

- $A_i \in \mathbb{R}$