

Matches :
 $\mathbf{M} \in \{0, 1\}^{|N_a| \times |N_b|}$, $\mathbf{M}_{ij} \mathbf{1}_n^T \in \{0, 1\}^n$, $\mathbf{1}_n \in \{1\}^n$

Partial maps :
 $\mathbf{T} = (\mathcal{T}_a, \mathcal{T}_b)$
 $\mathcal{T}_i = (N_i, E_i)$

registration

Transformation matrices :
 $T = \{\mathbf{T}\}_{i=1}^{|N_b|}$, $\mathbf{T} \in \mathbb{R}^{4 \times 4}$

transform clustering

Transformation clusters :
 $C = \{c_i\}_{i=1}^{|T|}$, $c_i \in \mathbb{N}$

hypothesis selection

Best transformation hypothesis :
 $h \subset T$

map fusion

Global topometric map :
 $\mathcal{T}_{\text{global}}$

