
Algorithm 1 Computation of MMPD between two cyclic granularities $A = \{a_j : j = 1, 2, \dots, J\}$, $B = \{b_k : k = 1, 2, \dots, K\}$ with A placed across x-axis and B across facets.

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1: procedure RAWMMPD( $A = \{a_j : j = 1, 2, \dots, J\}$ ,  $B = \{b_k : k =$ 
    $1, 2, \dots, K\}$ ,  $v = \{v_t : t = 1, 2, \dots, T\}$ ).
2:   for  $k = 1 : K$  do
3:     Find distances between pairs of all possible combinations of x-axis
     categories  $(a_j, a'_j)$  by computing JSD between quantiles of the measured
     variable  $q(v)$  across these combinations.
4:      $d \leftarrow JSD(q(v)_{a_j b_k}, q(v)_{a'_j b_k})$ 
5:      $m \leftarrow \max(d)$   $\triangleright$  maximum pairwise distance within each facet
6:   end for
7:   Set MMPD as  $\text{median}(m)$  where median is taken over all  $k$ .
8: end procedure

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