

Threshold computation

1. Given the original sequence for all harmony pairs; $\{v_t : t = 0, 1, 2, \dots, T - 1\}$, the *MMPD* is computed for all harmony pairs and is represented by the vector $MMPD_{obs}$, each element of the vector corresponding to the *MMPD* of each harmony pair.
2. From the original sequence a random permutation is obtained: $\{v_t^* : t = 0, 1, 2, \dots, T - 1\}$.
3. *MMPD* is computed for all harmony pairs for this permutation and is represented by the vector $MMPD_{sample}$.
4. Steps (2) and (3) are repeated a large number of times M (e.g. 1000).
5. For each permutation, one $MMPD_{sample}$ vector is obtained.
6. 95th percentile of all elements of the $MMPD_{sample}$ from different permutations is computed and stored in $MMPD_{threshold}$.
7. Harmony pairs for which $MMPD_{obs} > MMPD_{threshold}$ are chosen.