

$$\begin{pmatrix} \text{Gray Tree 1} \\ \text{Gray Tree 2} \end{pmatrix}, \begin{pmatrix} \text{Blue Tree 1} \\ \text{Red Tree 1} \end{pmatrix} = \text{SIM} \left(\begin{pmatrix} \text{Gray Tree 1} \\ \text{Gray Tree 2} \end{pmatrix}, \begin{pmatrix} \text{Gray Tree 1} \\ \text{Gray Tree 2} \end{pmatrix} \right) + \text{SIM} \left(\begin{pmatrix} \text{Blue Tree 1} \\ \text{Red Tree 1} \end{pmatrix}, \begin{pmatrix} \text{Blue Tree 2} \\ \text{Red Tree 2} \end{pmatrix} \right)$$

The diagram illustrates a similarity calculation between two sets of trees. On the left, a pair of trees (one gray, one blue) is compared with a pair of trees (one gray, one red). This is equated to the sum of two similarity measures: the first is the similarity between two identical gray trees, and the second is the similarity between a blue tree and a red tree.