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Average ligand expression in sender group:

$$\bar{L}_S = \frac{1}{|S|} \sum_{i \in S} X_{i,L}$$

Average receptor expression in receiver group:

$$\bar{R}_T = \frac{1}{|T|} \sum_{j \in T} X_{j,R}$$

Communication score:

$$score(S \rightarrow T, L-R) = \bar{L}_S \cdot \bar{R}_T$$