Take $\sigma_{j,k}$ to be *the number of shortest paths between* j *and* k, and $\sigma_{j,k}(i)$ to be the number of shortest paths between j and k *that pass through* i.

The *betweeness centrality* of node i is defined as:

$$C_{bet}(i) = \frac{1}{(n-1)(n-2)/2} \cdot \sum_{j \neq k, j \neq i, k \neq i} \frac{\sigma_{j,k}(i)}{\sigma_{j,k}},$$

i.e., the average fraction of shortest paths that pass through i