

The SNF Algorithm

- Creation of Similarity Matrix W_1, W_2, W_3
- Decomposition of W_i to S_i, P_i
- Fusion Iterations t
 - $t = 0$
 $P_i^{t=0} = P_i$
 - $t = 1$
 $P_i^{t=1} = S_i \times \left(\frac{\sum_{i \neq k} P_k^{t=0}}{3-1} \right) \times S_i^T$
 - \vdots
 - $t = n$
 $P_{fused} = \frac{P_1^{t=n-1} + P_2^{t=n-1} + P_3^{t=n-1}}{3}$
- Clustering P_{fused} using Spectral Clustering.
- Checking Quality of clusters using calculating average silhouette width.