

Figure 1: Probability distribution of pairwise node similarities using SAlign and its variant. The vertical axis represents the similarity score and the horizontal axes the probability.

As suggested we conducted a new experiment by introducing a new variant SAlign-5 that uses graphlet information as node features. We computed the pairwise similarity scores of the node representations, derived using both SAlign and SAlign-5. We subsequently plot the distribution of these pairwise similarity scores for both techniques in Figure 1. From the result, we find that for the variant the mass of the distribution is concentrated in a narrow region on the higher end of the x-axis indicating high similarity values of the representations of most node pairs (over-smoothing problem). On the other hand for SAlign, the distribution is more uniform indicating that a large fraction of node representations are quite distinct from each other. This shows that our method successfully tackles the over-smoothing problem.