

**[FOR XIXI: Shall I include other analysis for selecting the model?]**

We also ran additional simulations to determine the optimal hyper parameter settings and iteration count. These simulations were conducted in a similar fashion. These preliminary experiments revealed that, a delete-rate of **[0.14]**, an insert rate of **[0.21]** and a change rate of **[0.23]** are most beneficial. Also, we should run the evolutionary algorithm around **[35]** iterations long. Otherwise the algorithm tends to get stuck in a local optimum.