# Homework 3 : Parallelize Graph Algorithms for de Novo Genome Assembly

1. A description of your distributed data structures and parallel algorithms
2. A description of the computational and "communication" motifs of the parallel algorithms.
3. A description of the design choices/optimizations that you tried and how did they affect the performance.
4. A description of how you avoided race conditions.
5. Speedup plots that show how closely your parallel code approaches the idealized p-times speedup in the two experimental scenarios described in the previous section.
6. Discussion of the scalability and relative costs of the parallel graph construction and traversal algorithms.
7. A discussion on using UPC for such an application with the underlying computational motif.
8. A discussion on how would you implement the same parallel algorithms in a two-sided communication model (e.g. by using MPI).