

**Assignment 2****Due: July 10****Instructor: Professor Vijay K. Garg (email: garg@ece.utexas.edu)****TA: David R. Alves (email: dralves@utexas.edu)**

The goal of this assignment is to explore and program different parallel algorithms for the single source shortest paths problem, using the GO programming language. For this assignment, you can work in groups of two.

The assignment must be submitted on Canvas by as a zip file with the name **eid1\_eid2.zip**, which must include the code for problems 1,2 and a PDF with a summary comparison of running both algorithms in a few different graphs.

**Code instructions:** Starter code and coding instructions can be found in the class github website:  
<https://github.com/vijaygarg1/sum20-Parallel-algs/assignment/hw2>

1. **(20 points)** This is a programming assignment. Using the GO programming language, implement the Bellman-Ford parallel algorithm to find the shortest paths from a single source in a graph.
2. **(30 points)** This is a programming assignment. Using the GO programming language, implement the delta step algorithm to find the shortest paths from a single source in a graph. How does it compare to Bellman-Ford? Please compare the two algorithms in a few graphs and write down your conclusions over which algorithm is faster when and why.