

## Homework 2 (MPI)

1. This one will be much harder than the OpenMP
2. First we need to do some searching. In class, we covered a number of MPI functions and types, but there is no way to cover them all! Here are a few we will need for this homework.
  - a. MPI\_request
  - b. MPI\_Status
  - c. MPI\_Type\_contiguous
  - d. MPI\_Type\_commit
  - e. MPI\_Scatter
  - f. MPI\_Scatterv
  - g. MPI\_Irecv
  - h. MPI\_Isend
  - i. MPI\_Wait
  - j. MPI\_Reduce
  - k. MPI\_SUM
  - l. MPI\_MIN
  - m. MPI\_Barrier
3. Go online and search each other these and write a general description in your notes.
4. Ideally we would like to implement a 2D Mesh of processor, but in this case a linear order will be better because we will only need to check with other processors to the left and right.