

## Parallel Processing

### Project 2

turnin code: pp\_p2

Enhance p1 by supplying a port number to each of the ranks so they can use it in MPI\_Init etc. It can be used to connect back to the process running mpiexec and retrieve information such as how to contact other ranks.

Then, implement your own MPI that supports the following functions:

MPI\_Comm\_rank

MPI\_Comm\_size

MPI\_Finalize

MPI\_Init

MPI\_Send (just wrapper for Ssend)

MPI\_Ssend

MPI\_Recv

MPI\_Barrier

You only need to support MPI\_COMM\_WORLD for this project.

Place your object code into a library named libpp.a which test files can link against.

Compile and link the program previously named p1 as ppexec.

Have a makefile that will build libpp.a and compile and link ppexec as well as any test programs that we develop.

I will cd to my dir containing your project files and type:

```
rm -f libpp.a
```

```
rm -f *.o
```

```
make
```

Use turnin as in p1.