

I worked on the following parts of the project:

I read through mpi4py documentation, researched other websites for further information about MPI installation and details that are not included in the description. I learned what is inter and intra-communication.

I implemented string operations in slave.py. I designed the general flow of the slave.py including mechanisms for being able to communicate with both master and parent, waiting blockingly for all children output, processing those and sending to the parent, checking, and logging machine maintenance, keeping operation altering accurate, and looping correct amount of production cycles. Then I implemented the slave.py script that receives data and operates these mechanisms.

I debugged the code because there were inaccuracies in machines (debugging statements are not included in the final submission).

I wrote the design and advantages of parallel programming parts in the report.

I created a mock input, simulated a single production cycle by hand and draw a graph for it.