

UNIVERSIDAD DE COLIMA



Arquitectura de Servidores

Maestro: VERDUZCO RAMIREZ JESUS ALBERTO

Alumno: Braulio Daniel Rodriguez Bravo

Five Things Learned in This Activity

1. **MPI Process Communication:**

The assignment provided hands-on experience with MPI communication functions (e.g., `MPI_Send`, `MPI_Recv`) and how processes exchange data in a parallel environment.

2. **Parallel Distribution of Tasks:**

I learned how to distribute different parts of a computation among several processes, thereby effectively parallelizing a problem (in this case, calculating sphere volumes and additional statistics).

3. **Code Organization in Parallel Programming:**

Organizing code to perform both local computations (volume calculation) and collective operations (summing, finding maximum, and averaging) highlighted the importance of modular design in parallel programming.

4. **Synchronization and Data Integrity:**

Managing the order of operations among multiple processes (such as ensuring that the main process receives all computed volumes before sending them on) deepened my understanding of synchronization challenges in MPI applications.

5. **Error Handling and Debugging in MPI Applications:**

Although not explicitly shown in the code, the process of testing and debugging MPI code reinforced the significance of careful error checking and validation when developing parallel programs.