

Final Learning

In the High-Performance Computing lab, we studied about Open MPI, image processing, parallel processing and CUDA programming. Parallel processing, a central theme, taught us to optimize computational efficiency by distributing tasks across multiple processing units concurrently, gained hands-on experience in parallel algorithm design, load balancing, and synchronization management, crucial for handling large-scale data effectively. This knowledge, integrated with CUDA and MPI, enhanced my ability to develop scalable applications for diverse computational challenges. Overall, the course provided a robust understanding of parallel computing and its practical applications in high-performance computing domains.