COMP 322: Lab 5: Loop Chunking and Barrier Synchronization

February 11, 2015





Introduction

- STIC setup
- Get a better understanding of barriers and loop chunking
- Understand the overhead of barriers
- Chunking to mitigate task creation overhead and barriers

Setting STIC

- STIC(Shared Tightly-Integrated Cluster)
- STIC allows you to gain access to compute nodes to obtain reliable performance timings for your programming assignments
- Login to STIC as ssh netid@stic.rice.edu
- source /home/smi1/dev/hjLibSource.txt
- java -version, mvn -version
- Sbatch, Slurm, Squeue, Scancel Operations on jobs on STIC

Instructions

Implement the parallel versions of one dimensional iterative averaging

- Forseq-Forpar
- Forseq-Forpar chunking
- Forpar-Forseq
- Forpar chunking Forseq

For more details of parallel versions, please refer to lecture 12 slides.