

ECE 6130 Spring 2019

Homework #1 BFS (10% of grade)

Study the Graph500 benchmark specification and reference code at <https://graph500.org/>, develop a high-performance parallel BFS, and report the implementation and evaluation results on ColonialOne or the machine(s) of your choice.

1. Draft report (5%) due on Tuesday January 22nd. Must include results for graphs with 100, 1K, and 1M edges. Ideally your implementation should at least outperform the reference code by 2x at this point.
2. Final report (5%) due on Tuesday January 29th. Must include results for graphs with 1B edges. The target improvement is at least 10x over the reference code.