

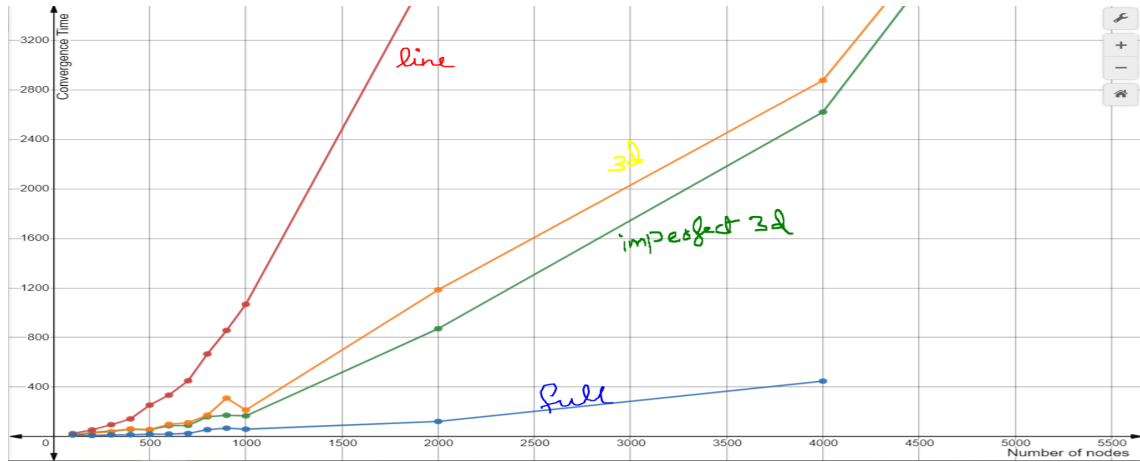
Project 2 - Gossip

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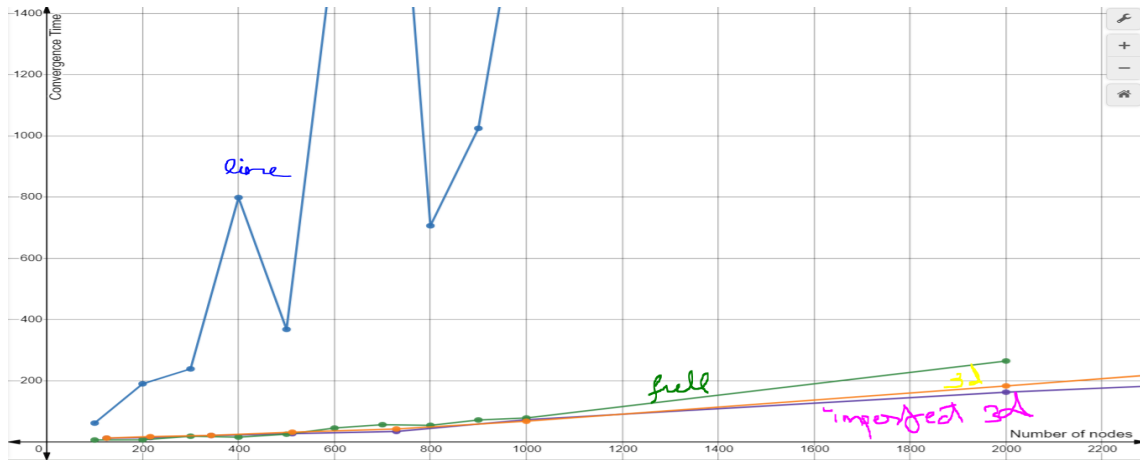
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1 Nodes vs Convergence

1.1 Gossip protocol



1.2 Push-Sum protocol



In gossip, full network topology is by far the fastest one. The line topology is slow in both cases as expected and takes the form of $O(N^2)$ on average. In push sum, the 3D and imperfect-3D were way faster than in gossip, however, the full network topology stays the same in both cases.

The largest number of nodes that I was able to run the protocols for was 8000. The bottleneck is actually building the topology, the gossip runs pretty fast.