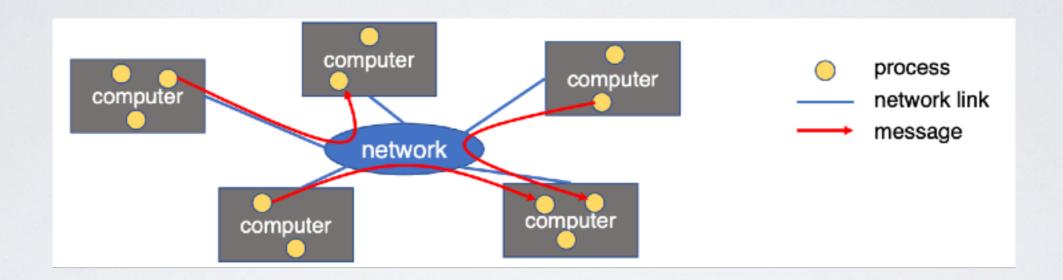
What is a distributed system?

→ Cooperating processes in a computer network



"A distributed system is one where I can't do work because some machine I've never heard of isn't working!" Leslie Lamport

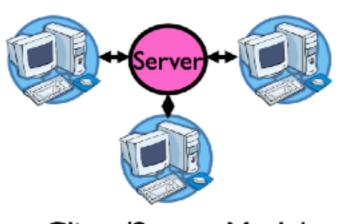
Popular distributed systems today: Google file systems, BigTable, MapReduce, Hadoop, ZooKeeper, etc.

Forms & models of distributed systems?

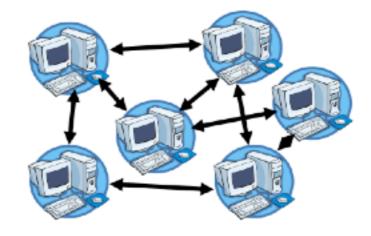
Degree of integration

- Loosely-coupled internet applications (e.g email, web, FTP, SSH)
- Mediumly-coupled remote execution (e.g RPC), remote file system (e.g NFS)
- Tightly-coupled distributed file systems (e.g. AFS)

major functions performed by a single physical computer



Client/Server Model



physically separate computers working together on some task

Cluster/Peer-to-Peer Model