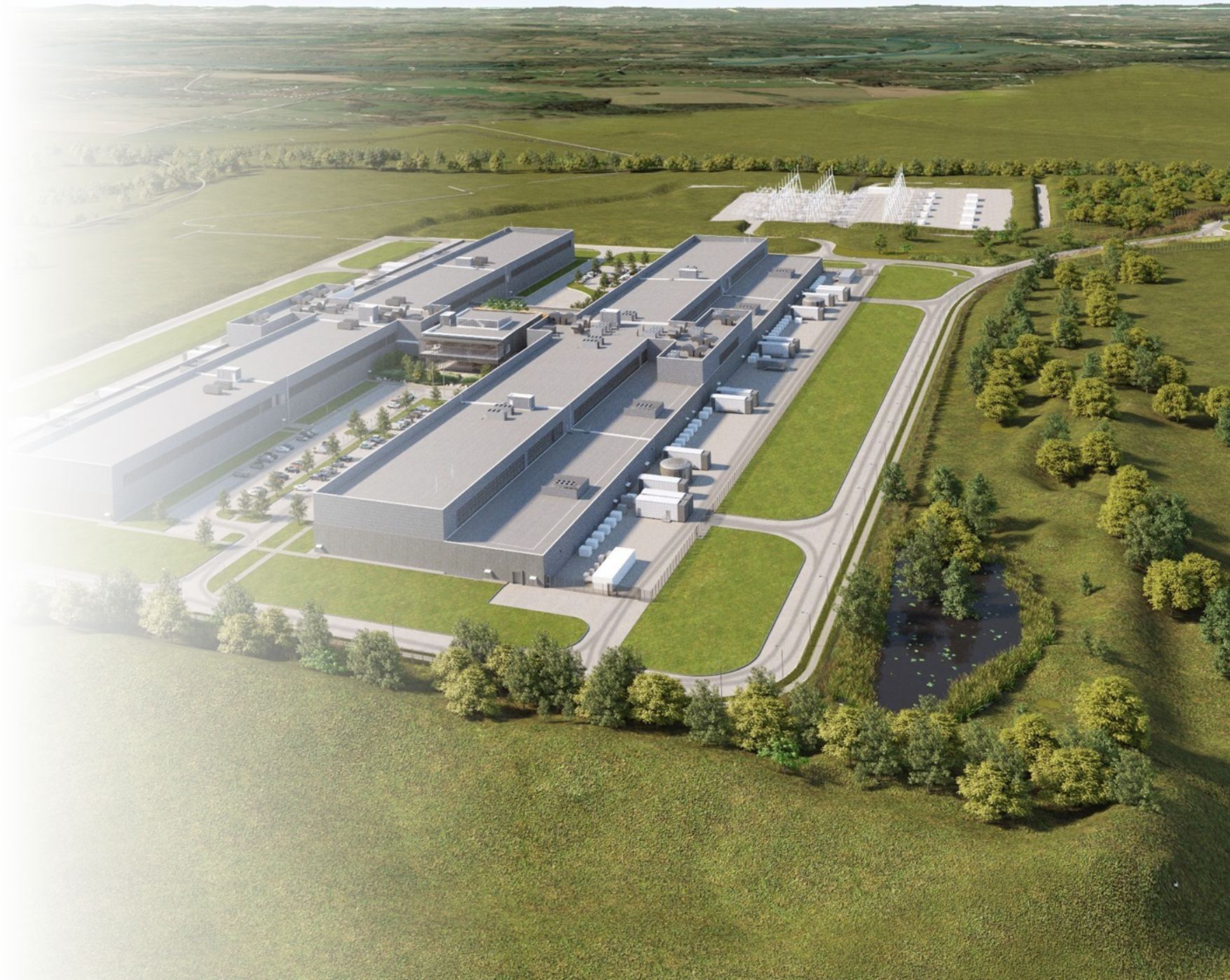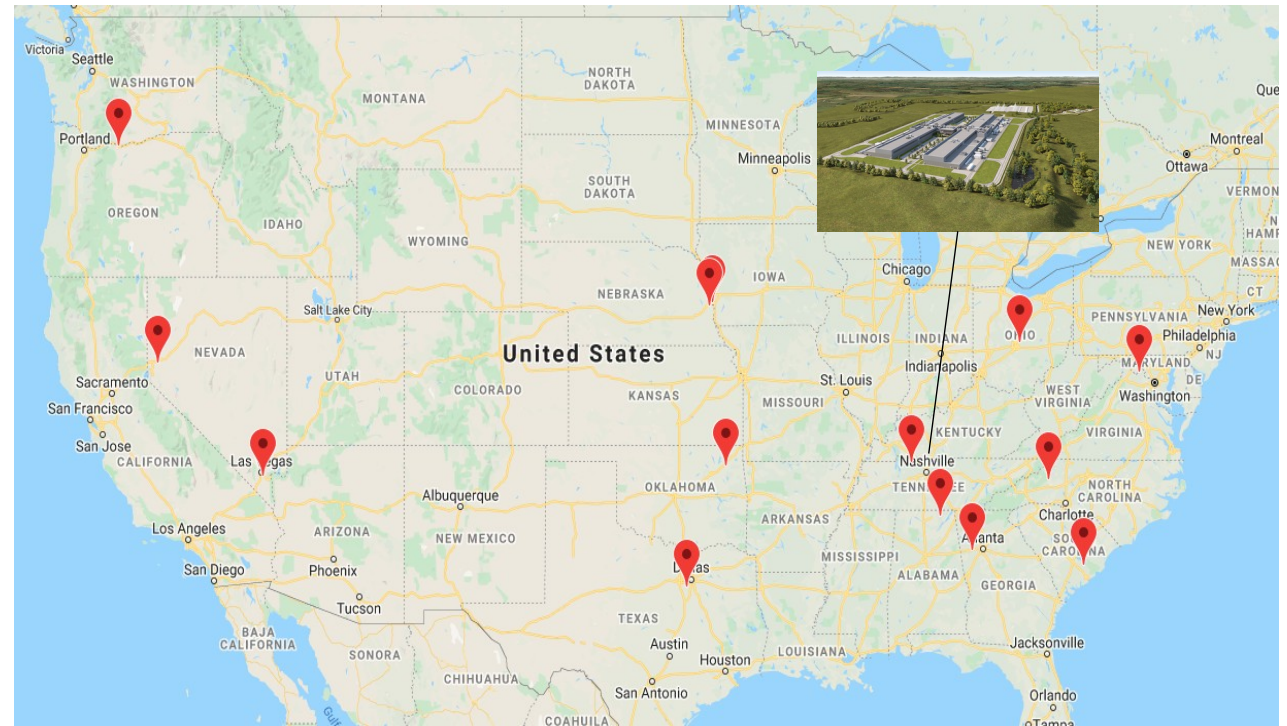# DISTRIBUTED STORAGE SYSTEMS

CSE 501

Haonan Lu

A row of racks of servers inside a typical datacenter
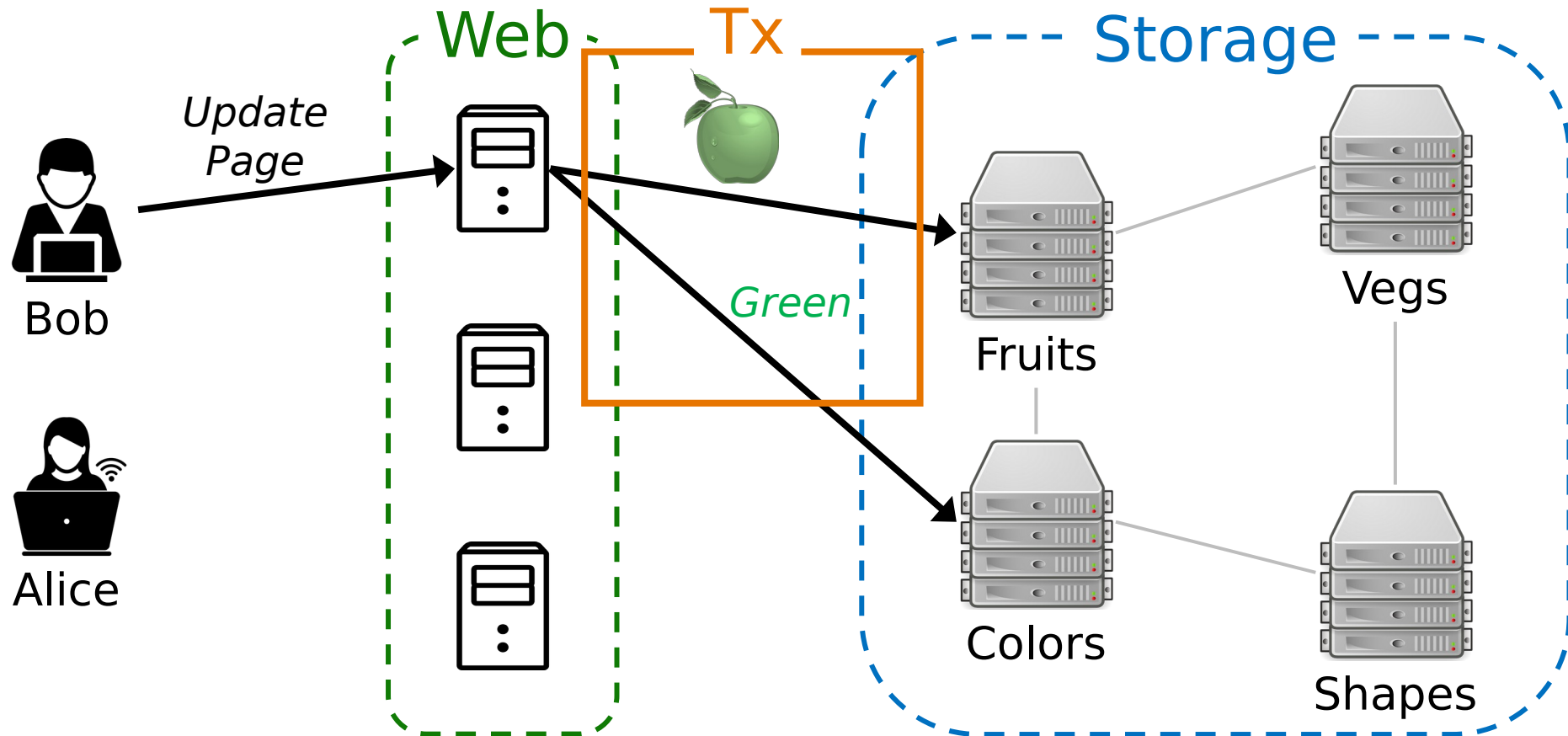
A typical
datacenter

Geographically dispersed datacenters

Distributed Storage Systems
Data Sharding Enables Large Scale

Research Problems

- Performance
  - System protocols achieving higher throughput and lower latency
  - Our research looks at it from a fundamental perspective

- Correctness
  - Verify the system indeed provides the claimed guarantees

- Easy adoption
  - Deploy in production systems --> practical impacts