

# 15-441 Computer Networks

## Lecture 4

### Layered Architecture

#### Physical Layer

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# Review of Last Lecture

- ❖ **Many types of networks**
- ❖ **Switching architectures**
- ❖ **Other concepts**
  - Timing graph
  - Conversion among transmission rate (bps), time (second), distance (meter)

# Organizing Network Functionality

- ❖ **Many kinds of networking functionality**
  - e.g., encoding, framing, routing, addressing, reliability, etc.
- ❖ **How should they be organized?**
- ❖ **How should they interact?**
- ❖ **Layering is one answer to these questions**