CS4865 - Class 5 01/15/25

Basic Protocol Architecture

Simplified View of Data Comms

Application: File trans, email, web browsing, remote login, etc

Computers: Devices involved in Data Comms

Networks: Infrastructure enabling comms between devices.

Divide Tasks into 3 Layers

Application, Transport, Network

History & Terminology of Network Protocols

ARPANET & TCP/IP Protocol Suite

- ARPANET implemented TCP/IP Suite which is the foundation of the modern global internet.
- Standards are maintained by IAB ('internet arch board) and IETF ('internet engg taskforce)
- No formal protocol arch, often categorized into 5 layers

ISO's Open System Interconnection (OSI) Model

- Introduced in 1970s by International Organization for Standardization
  Provides a theoretical 7-layer model
- TCP/IP is more dominant than OSI
- Though not implemented in practice, principles & terminology are still relevant Today.