COMPUTER NETWORKS

Instructor Notes

Unit – 4
Network Layer and Internet Protocol

Overview of Network Layer: Forwarding and routing, Network Service Models; Inside Router: Input port processing and destination-based forwarding, Switching, Output port processing, where does Queueing occur? Packet scheduling; The Internet Protocol (IP) IPV4: Datagram Format, Fragmentation, Addressing, NAT; Introduction to Network layer Protocols: DHCP, ICMP; IPv6 Addressing: Address space allocation, Global unicast addresses, Autoconfiguration, Renumbering, IPv6 Protocol: Packet Format, Transition from IPv4 to IPv6; Introduction to Routing Algorithms: Link State and Distance Vector.

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* http://gaia.cs.umass.edu/kurose_ross/interactive/