# CS447-002: Lecture Note (Lecture #21, April 3, 2024)

## 1. Pick up:

• Attendance card

#### 2. Announcements:

- Quiz #8 is scheduled today (10 to 15 minutes at the end)
  - A timekeeper wanted

#### 3. IP addresses

Exercise question on March 27th

#### 4. ARP (Address Resolution Protocol)

- MAC (Medium Access Control) address (demonstrate it by ARP2.ppt)
  - MAC Vendor ID
- How does ARP do it?
  - ARP Cache

### 5. Internet routing

- Autonomous System (AS)
- Tire-1, 2, and 3 AS (ISP)
- CIDR-routing (distance-vector routing algorithm)
- Exercise question on April 1st

# 6. Routing algorithms (if time permits)

- Distance-Vector Algorithm (Dijkstra Shortest-Path Algorithm)
- Link-State Algorithm (Bellman-Ford Shortest-Path Algorithm)

#### **7. Quiz** #**8** (10 to 15 minutes)

- A timekeeper wanted