

# How do I search for my Beatles file?

- Gnutella *routes* different messages within the overlay graph
- Gnutella protocol has 5 main message types
  - **Query** (search)
  - **QueryHit** (response to query)
  - **Ping** (to probe network for other peers)
  - **Pong** (reply to ping, contains address of another peer)
  - Push (used to initiate file transfer)
- We'll go into the message structure and protocol now
  - All fields except IP address are in little-endian format
  - 0x12345678 stored as 0x78 in lowest address byte, then 0x56 in next higher address, and so on.