

Data Representation

CS 1428

Binary Representation of Information

- Detecting Voltage Levels
 - Why not 10 levels?
 - Would be unreliable
 - Not enough difference between states
 - On/Off
 - Fully Charged - Fully Discharged
 - Magnetized - Demagnetized

Bits, Bytes, and so on

- A bit is one 0 or 1
 - Short for “binary digit”
- A byte is a collection of 8 bits
 - They named it “byte” instead of “bite” so you couldn’t easily mess up the spelling and confuse it with “bit”.