DAY 3

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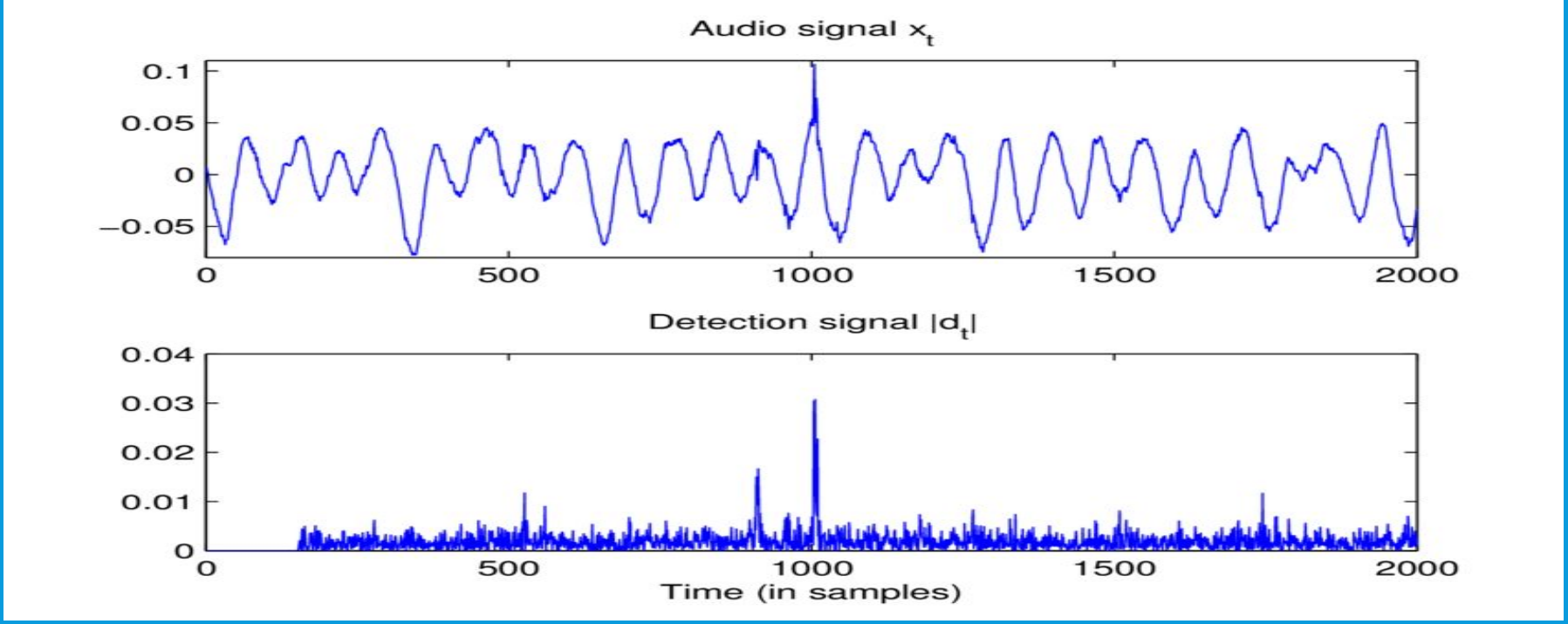
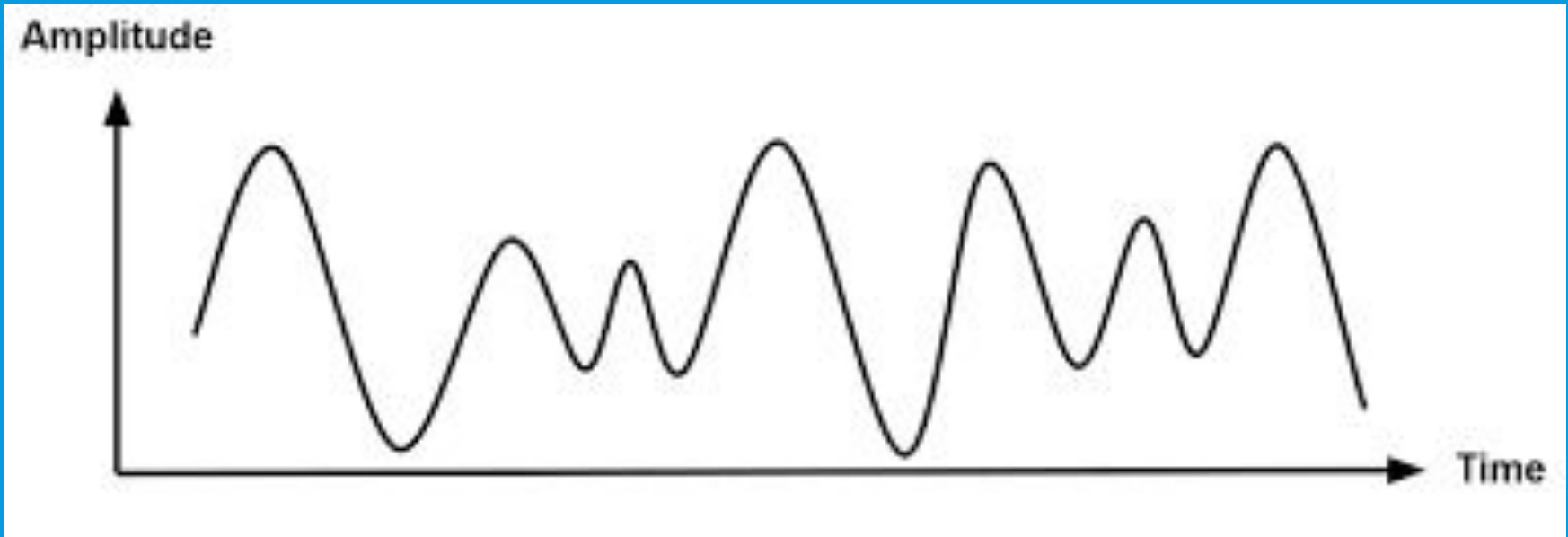
SIGNALS

- A signal is a function that conveys information about a phenomenon.
- It refers to any time varying voltage, current, or electromagnetic wave that carries information.



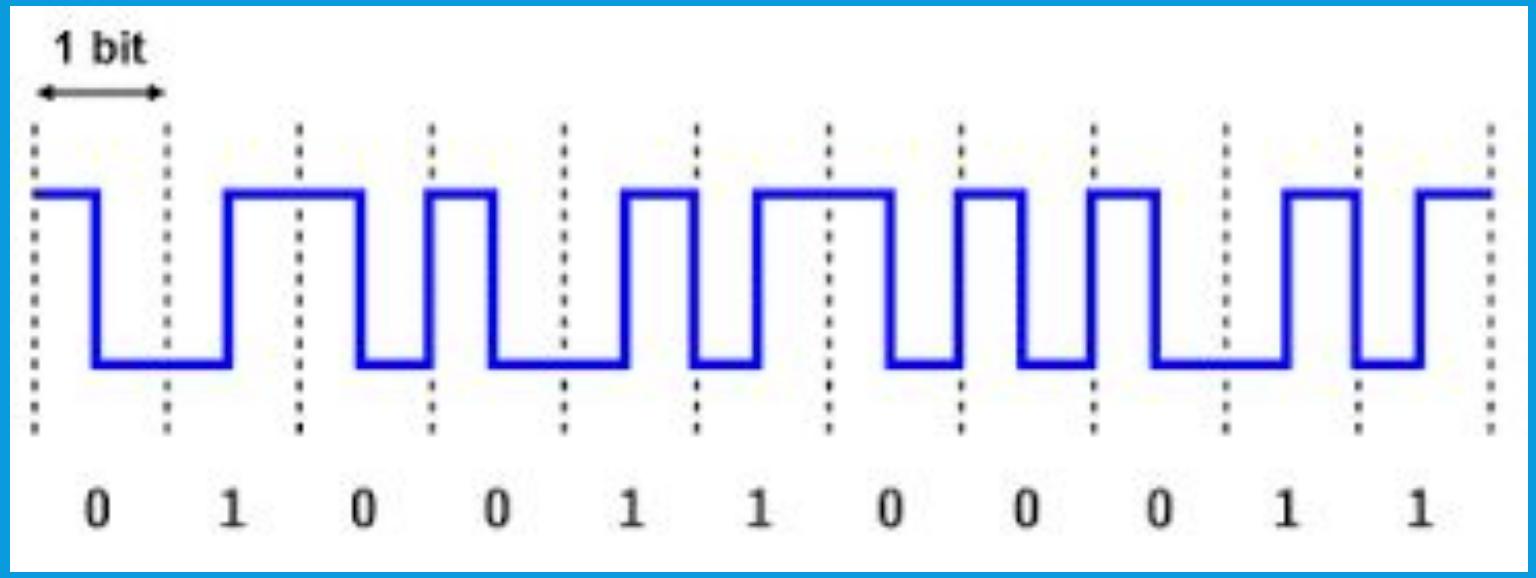
ANALOG SIGNAL

- Analog signal is a continuous signal in which one time-varying quantity represents another time-based variable.
- An analog signal is a continuous wave that changes over a time period.
- E.g.: audio signal

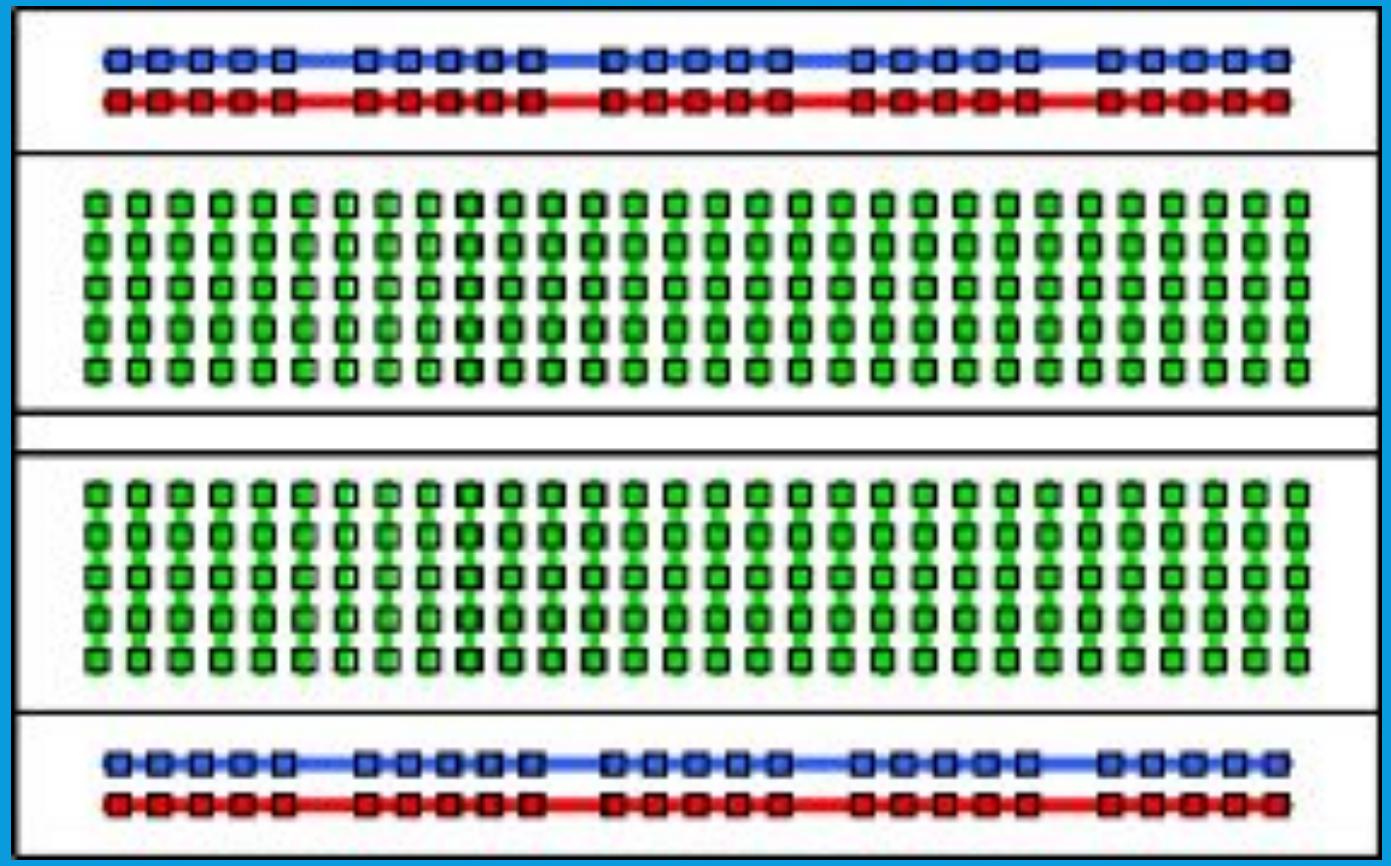


DIGITAL SIGNAL

- A digital signal is a signal that represents data as a sequence of discrete values.
- At any given time it can only take on, at most, one of a finite number of values.
- E.g. : Output from digital sensors and devices.



BREADBOARD



READING ANALOG DATA

- Analog data can be read in Arduino using analogRead() function.
- Arduino boards contain a multichannel, 10-bit analog to digital converter. This means that it will map input voltages between 0 and the operating voltage(5V or 3.3V) into integer values between 0 and 1023.
- Find the resolution of Arduino.