

Signal: Something that conveys information

System: Takes signal(s) as input and produces a signal(s) as output

Independent Variables For Signals (Examples)

Time: t

Location: x, y, z

Frequency: $f(\text{Hz})$ or $\omega(\text{radial})$

Dependent Variables For Signals (Examples)

Color

Voltage

Current

Temperature

Mass / Mass Density

Density Distribution

Rotational Velocity

Dependent & Independent Variables for Signals

can be "continuous" or "discrete"

Analog
 Signal:

Independent variables
 are continuous

Independent variables
are continuous

Dependent variables
are continuous

Digital Independent variables
 Signals: are discrete

Independent variables
are discrete

Dependent variables
are discrete

Mixtures are possible

- often used during analog to digital conversion