

NARRATIVE AND ART-MAKING THROUGH DIGITAL INTERFACES

DATA PIPELINES: INPUTS, OUTPUT, AND TRANSFORMATIONS

INPUTS

mice/trackballs/touchpads

gamepad / joystick

keyboard

midi keyboard

pen / stylus

punch card

magnetic tape

scanner (2d/3d)

tangible input devices

barcode reader

QR code

motion sensor

pressure sensor

heat sensor

camera

microphone

RFID tag

flex sensors

passive infrared sensor

capacitive touch sensor

barometric pressure

speedometer

accelerometer

gyroscope

GPS (global positioning)

altimeter

dial / switch / button

seismometer

airflow

blood oxygenation

magnetometer

metal detector

moisture sensor
radar
wireless sensor
UWB radio time of flight sensor
GSR – galvanic skin response
heartbeat sensor
Braille reader
USB flash
Clock
EEG – electroencephalogram, brainwave tracking / activity
https://en.wikipedia.org/wiki/List_of_sensors

OUTPUTS

actuator (hydraulic, pneumatic, electric, mechanical, thermal, magnetic)
motor (stepper (fixed increment), servo (with position feedback), direct drive, DC brushed/brushless)
computer display / monitor
printer (laser, inkjet, 3d printer, dot matrix)
speaker (audio)
haptic feedback (vibration/touch feedback)
plotter
microfiche
film recorder
projector
speech generating device
braille embosser
scent generators
fog/smoke generators
laser
LED (light emitting diode)
fire generator

INPUT / OUTPUT

modems
network interface cards
touch screens

headsets (speaker/microphone)
vr headset (head tracking, microphone, display, speaker)
fax machines
audio cards
wifi cards
Bluetooth cards
POTS (plain old telephone system)

DIGITAL TRANSFORMATIONS (verbs)(what do we do with the data inside the computer)(a selection)

sort
convert
map
compress
compile
translate
calculate
download
collect
represent
process
export
learn
analyze
detect
decide
store
save
combine
modify
control
transmit
switch
play
track
monitor
recover
scan

trigger
delete
make
render
draw
search
search
select
suggest
list
aggragate
infer
iterate
quantify
count
sample