Interactions with Python, Arduino and Kinect

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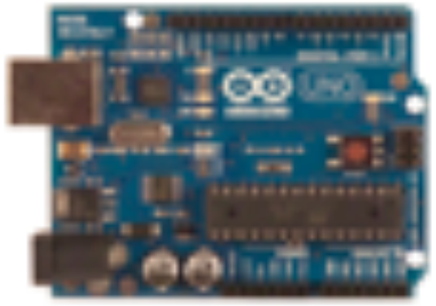
Poofer!

recycled stainless steel.

Hardware

Computer

Kinect



Arduino Uno Microcontroller

Servo

Solid State Relay

Asco Solenoid Valve

Push Button Switch

Neon Transformer

Spark Plug

Propane Tank

Bill Acceptor

Kinect

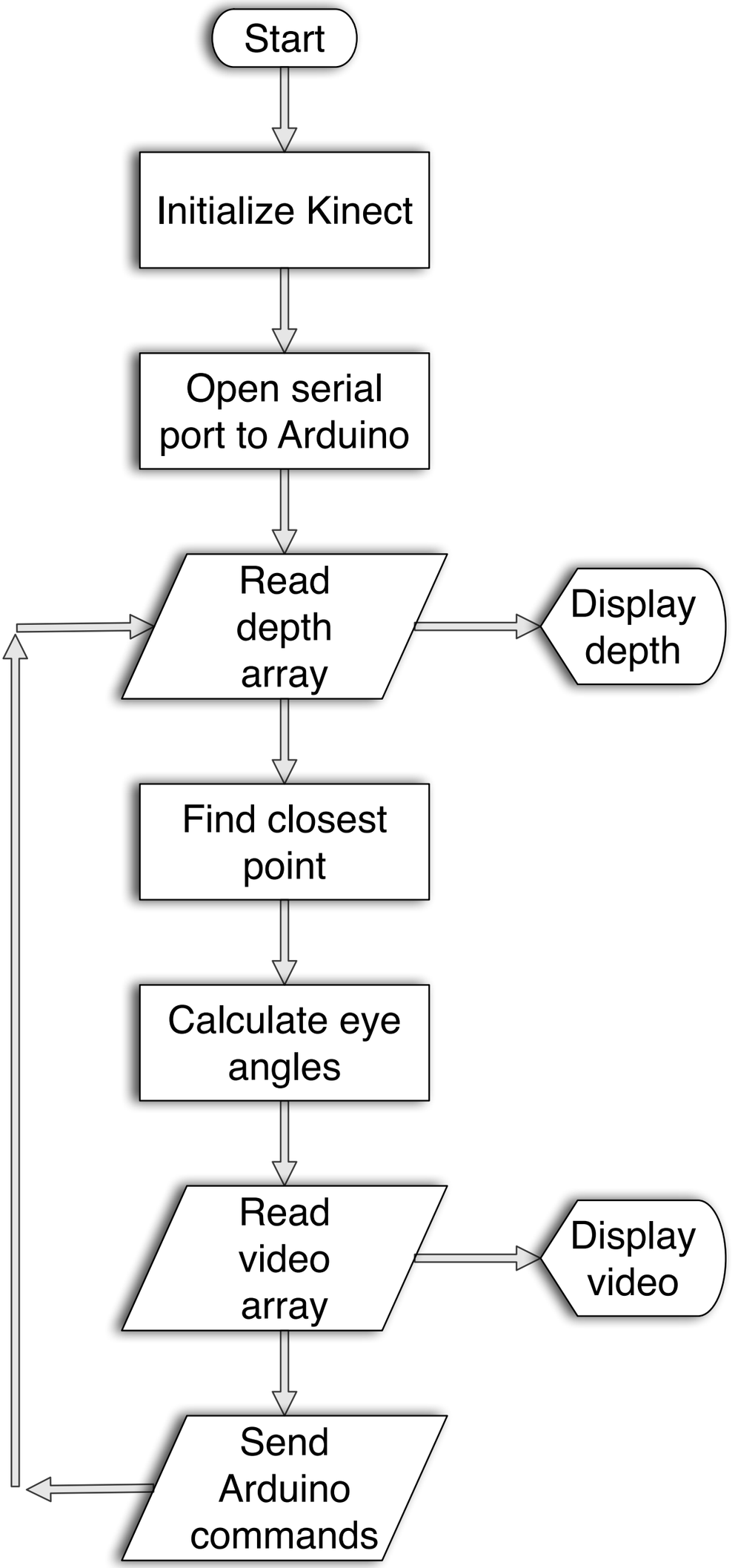
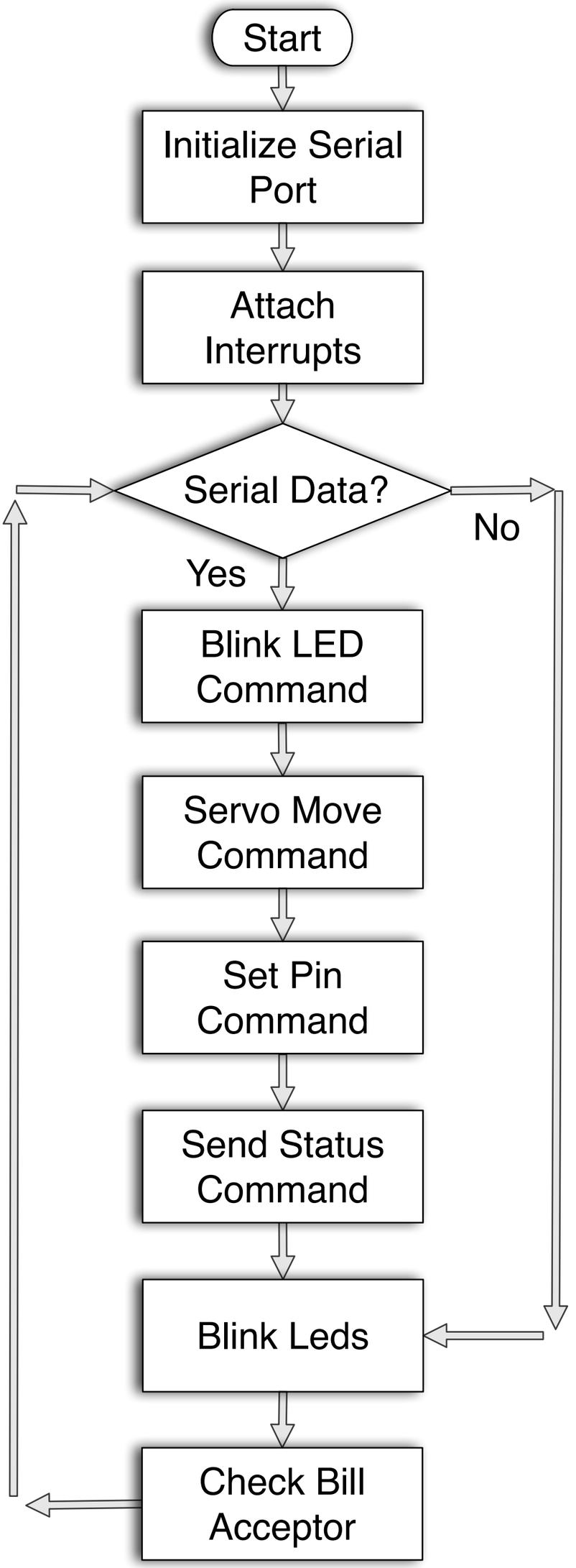
640 x 480 rgb camera for video
infrared projector
640 x 480 infrared camera for depth
4 microphones array
30 fps
57° horizontal / 43° vertical field of view

Arduino

Microcontroller	ATmega328
Operating Voltage	5V
Input Voltage	7-12V
Digital I/O Pins	14 (6 w/ PWM)
Analog Input Pins	6
DC Current / I/O Pin	40 mA
Flash Memory	32 KB
SRAM	2 KB
EEPROM	1 KB
Clock Speed	16 MHz

Software

Computer / Arduino / Kinect Interaction



Arduino Flow