



Unconscious Automatons on Facebook

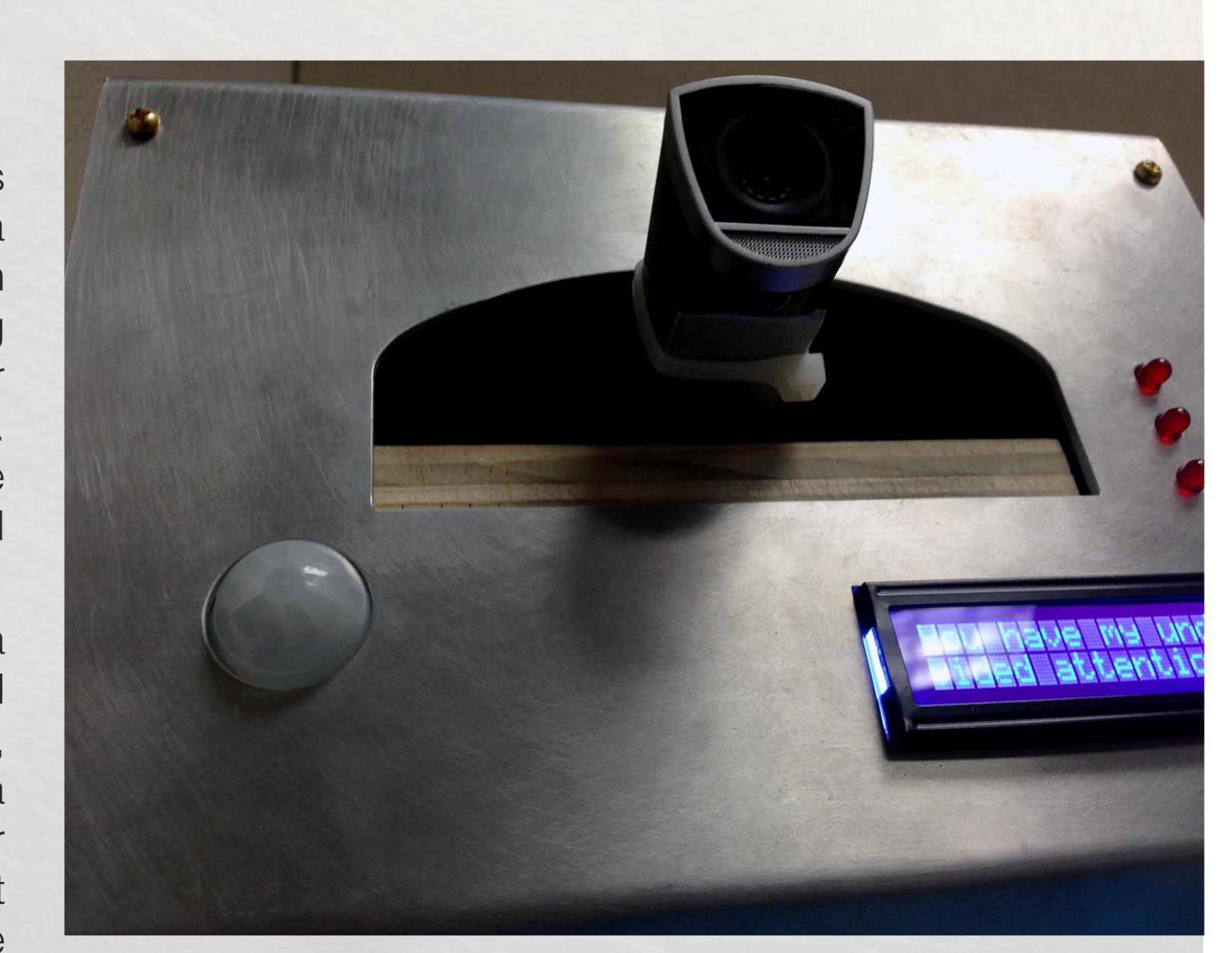
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Abstract

The Internet is a relatively new phenomenon that has completely morphed the modern world. Living on a college campus, I almost never find myself in a room without access to the Internet and social media. I, along with many others in my generation, spend hours per month mindlessly surfing the Internet and Facebook. With my project, I want to start a conversation on the topic of how the Internet has shaped our society and whether these changes are positive or negative.

To do so, I will build an installation of three robots and a monitor. Each robot will be interactive in the physical world through the use of an Arduino, sensors, motors, LCD screens and LEDs. Each robot will also have a Facebook account where they can post photos of their surroundings, status updates or comments. I hope that by watching my robots mindlessly performing the same tasks that we do everyday, viewers will begin to ask the same questions proposed above.



Software

Arduino

- -Receives input from sensors
- -Moves motor
- -Displays text on LCD
- -Writes to serial (event detection)

Hardware

- -Aluminum + wood (water jet cut)
- -Arduino Uno
- -Sensors, LCD Screen, LEDs, Servo
- -Webcam
- -Computer

Processing

- -Reads from serial
- -Displays live feed from webcams
- -Facial Recognition
- (openCV library)
- -Determines Facebook action
- -Runs Python Script to launch Facebook

Python

- -Posts to Facebook (photo, status, comment)
- -Opens/controls web browser (Selenium Module)

Arduino

Processing

-> display webcam feed <-

- -> sense motion
- -> stop webcam
- -> write to serial ----> read from serial
 - -> take photo
 - -> write info to file
 - -> run python script ----->

Action Diagram

Uploading a photo to Facebook

Python

- -> read file
- -> upload photo
- -> display photo's facebook page

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