

Let's build a Zombie Detector

OSTS 2017 Hackathon



Keep Screen On

```
getWindow().addFlags(WindowManager.LayoutParams.FLAG_KEEP_SCREEN_ON);
```

ATCamara.TakePhoto

Name: Location In /sdcard/Pictures/
default: "out.bmp"

Width: Resize the returned image to this Width.
default: 400

Height: Resize the returned image to this Height.
default: 400

Contrast: sets the image Contrast.
default: 90

Brightness: sets the image Brightness.
default: 10

ATTensorflow.Classifier

Name: Location In /sdcard/Pictures/ to read image from
default: "out.bmp"

Contrast: sets the image Contrast.
default: 90

Brightness: sets the image Brightness.
default: 10

ATmraa.TMP006

The TMP006 Breakout can measure the temperature of an object without making contact with it. By using a thermopile to detect and absorb the infrared energy an object is emitting, the TMP006 Breakout can determine how hot or cold the object is.

The TMP006 Breakout has a wide temperature detection range of -40°C to 125°C.

i2cAddress: The i2c bus the sensor is attached to.
default: "I2C0"

ATmraa.BME280

The BME280 Breakout has been design to be used in indoor/outdoor navigation, weather forecasting, home automation, and even personal health and wellness monitoring.

The on-board BME280 sensor measures atmospheric pressure from 30kPa to 110kPa as well as relative humidity and temperature.

i2cAddress: The i2c bus the sensor is attached to.
default: "I2C0"

RequestSensor: The sensor to request values form.
options: "Temperature", "Pressure", "Altitude", "Humidity"
default: "Temperature"

ATmra.LED

pin: The GPIO the led is attached to.
default: "J6_47"

on: A boolean true turns on the led.
options: true, false
default: false

delay: A delay until the callback is called.
default: 0

ATmraa.BUZZER

pin: The PWM the buzzer is attached to.
default: "PWM_3"

note: The Note to play (DO, RE, MI, etc.)
options: "DO", "RE", "MI", "FA", "SOL", "LA", "SI",
default: "DO"

delay: The time in microseconds for which to play the sound; if the value is 0,
the sound is played indefinitely
default: 500000

Tensorflow for Poets

Tensorflow for Poets 1

<https://codelabs.developers.google.com/codelabs/tensorflow-for-poets>

Tensorflow for Poets 2

<https://codelabs.developers.google.com/codelabs/tensorflow-for-poets-2>

ATTensorflow.Classifier

MODEL_FILE: The filepath of the model GraphDef protocol buffer.

default: "file:///android_asset/www/retrained_graph.pb"

LABEL_FILE: The filepath of label file for classes.

default: "file:///android_asset/www/retrained_labels.txt"

NUM_CLASSES: The number of classes output by the model.

default: 2

INPUT_SIZE: The input size. A square image of inputSize x inputSize is assumed.

default: 299

IMAGE_MEAN: The assumed mean of the image values.

default: 128

IMAGE_STD: The assumed std of the image values.

default: 128

INPUT_NAME: The label of the image input node.

default: "Mul:0"

OUTPUT_NAME: The label of the output node.

default: "final_result:0"