tzutalin / **Android-Object-Detection**

☕ Fast-RCNN and Scene Recognition using Caffe

#detection #caffe #android #scene-recognition

41 commits | **1** branch | **0** releases | **2** contributors

Branch: **master** | **New pull request** | **Create new file** | **Upload files** | **Find file** | **Clone or download**

tzutalin Update README.md — Latest commit `ff03198` on 1 Sep

.idea	Update compile sdk to 25	9 months ago
app	Update compile sdk to 25	9 months ago
cnnlibs	Update compile sdk to 25	9 months ago
demo	Add demo images	2 years ago
gradle/wrapper	Update gradle version to 2.3	9 months ago
tools	Uupdate model URL	2 years ago
.gitignore	Update gradle to 2.2.0	a year ago
.travis.yml	Update travis because of upgrading bulid tools	9 months ago
README.md	Update README.md	3 months ago
VisionRecognition.iml	Add Andriod libraray module	2 years ago
build.gradle	Update sdk version to 25	9 months ago
contributors.txt	First comit	2 years ago

gradle.properties	First comit	2 years ago
gradlew	First comit	2 years ago
gradlew.bat	First comit	2 years ago
settings.gradle	Add Andriod libraray module	2 years ago
setup.sh	Update gradle to 2.2.0	a year ago

README.md

Android-Object-Detection

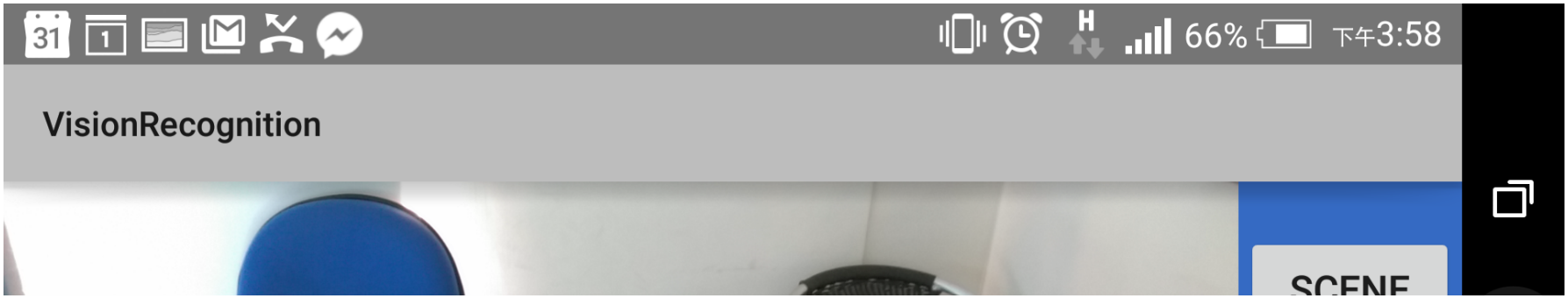
Requirements

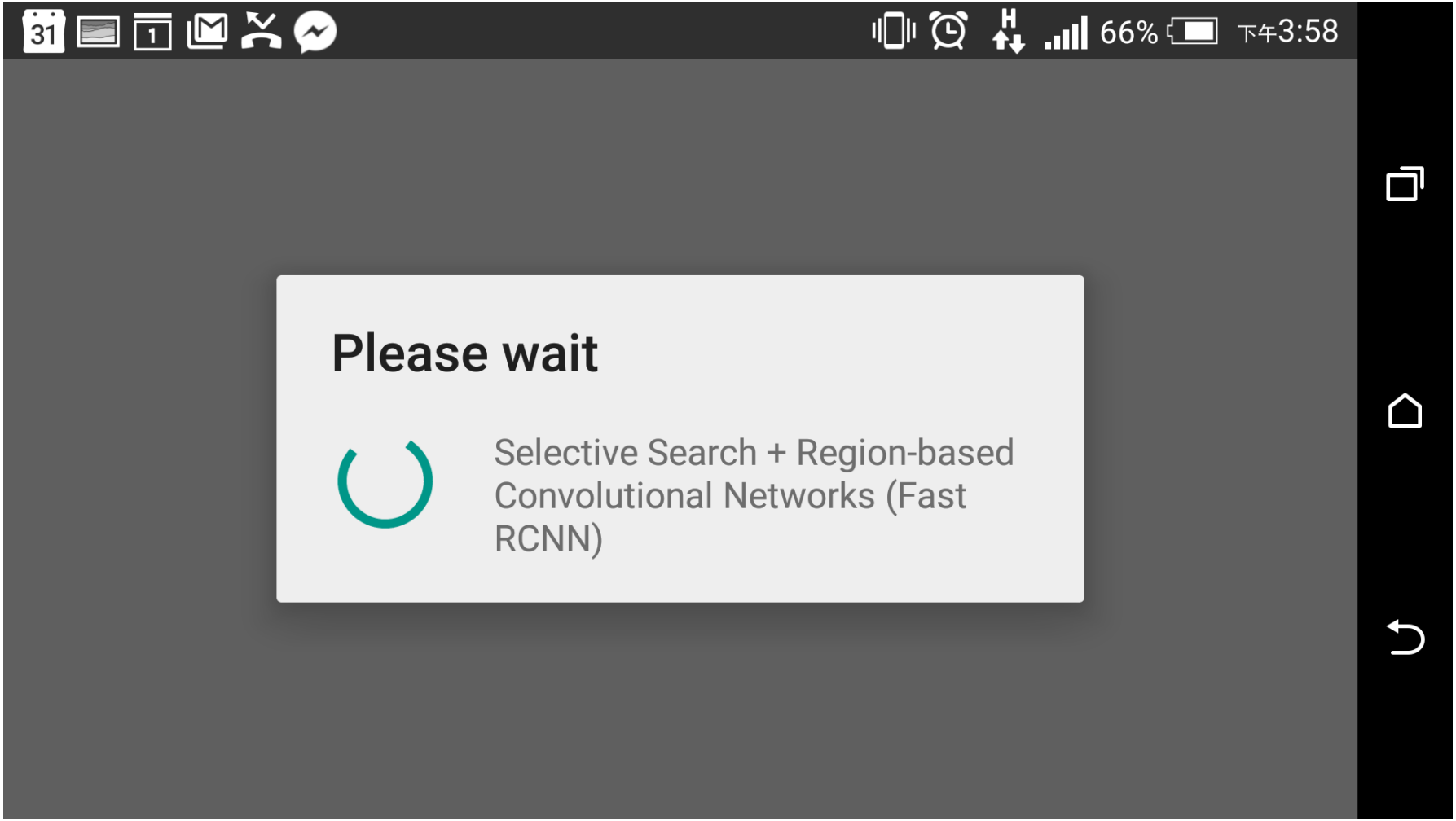
- Android 4.0+ support
- ARMv7 and x86 based devices
- Get the Caffe model and push it to Phone SDCard. For object detection, network(*.prototxt) should use ROILayer, you can refer to Fast-RCNN. For scene recognition(object recognition), it can use any caffe network and weight with memory input layer.
- Build with Gradle. You can use Android studio to build

Feature

- Object detection - Region-based Convolutional Networks detection Selective Search on Android + FastRCNN
- Scene recognition - Convolutional neural networks trained on Places Input a picture of a place or scene and predicts it.

Demo

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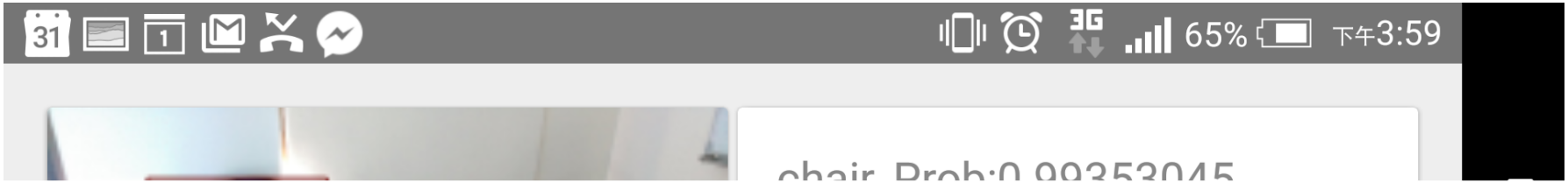
Please wait
Selective Search + Region-based Convolutional Networks (Fast RCNN)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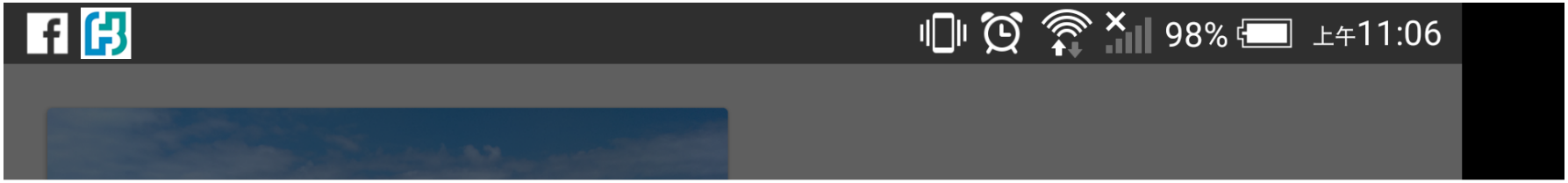
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Usage

- Download and push the neccessary file to your phone. There should be model and weight in /sdcard/fastrcnn and /sdcard/vision_scene.

```
$ ./setup.sh
```

- Build and run the application using gradlew or you can open AndroidStudio to import this project

```
$ ./gradlew assembleDebug

$ adb install -r ./app/build/outputs/apk
```

Besides, you can change deep learning's model, weight, etc in VisionClassifierCreator.java

```
public class VisionClassifierCreator {
    private final static String SCENE_MODEL_PATH = "..";
    private final static String SCENE_WIEGHTS_PATH = "..";
    private final static String SCENE_MEAN_FILE = "..";
    private final static String SCENE_SYNSET_FILE = "..";

    private final static String DETECT_MODEL_PATH = "..";
    private final static String DETECT_WIEGHTS_PATH = "..";
    private final static String DETECT_MEAN_FILE = "..";
    private final static String DETECT_SYNSET_FILE = "..";
 }
```

Contribution

- Send pull request
- Buy Me a Coffee

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```

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```