### clone code

```
$(..): git clone https://github.com/Tencent/ncnn
```

### build code

CPU version

```
$: cd ncnn
$: mkdir build
$: cd build
$(build): cmake ..
$(build): make -j12
```

**GPU** version

```
$(..): wget https://sdk.lunarg.com/sdk/download/1.1.92.1/linux/vulkansdk-linux-
x86_64-1.1.92.1.tar.gz?Human=true -0 vulkansdk-linux-x86_64-1.1.92.1.tar.gz
$(..): tar -xf vulkansdk-linux-x86_64-1.1.92.1.tar.gz
$(..): export VULKAN_SDK=`pwd`/1.1.92.1/x86_64
$: cd ncnn
$: mkdir build
$: cd build
$(build): cmake -DNCNN_VULKAN=ON ...
$(build): make -j12
```

## examples

```
$: vim CMakeLists.txt
```

```
#add_subdirectory(examples)
add_subdirectory(benchmark)
add_subdirectory(src)
if(NCNN_BUILD_TOOLS)
    add_subdirectory(tools)
endif()
add_subdirectory(tools)
add_subdirectory(tools)
endif()
add_subdirectory(tools)
add_subdirectory(tools)
endif()
```

```
$: cd build
$(build): cmake -DNCNN_VULKAN=ON ..
$(build): make -j12
$(build): cd examples
$(build/examples): cp ../../examples/squeezenet_v1.1.param ./
$(build/examples): cp ../../examples/squeezenet_v1.1.bin ./
$(build/examples): ./squeezenet <your_image_path>
```

# add your model

准备好你得模型得 deploy.prototxt 和 model.caffemodel 文件 ncnn 只认识新版的 prototxt 和 caffemodel 文件

```
$(caffe):./build_release/tools/upgrade_net_proto_text [老 prototxt] [新 prototxt]
$(caffe):./build_release/tools/upgrade_net_proto_binary [老 caffemodel] [新
```

#### caffemodel]

deploy.prototxt 的 input 的 dim 改成 1

```
layer {
  name: "data"
  type: "Input"
  top: "data"
  input_param { shape: { dim: 1 dim: 3 dim: 227 dim: 227 } }
}
```

caffe 文件转换称 ncnn 识别的

\$:./build/tools/caffe/caffe2ncnn deploy.prototxt model.caffemodel test.param test.bin

在 examples 文件夹下按照其他的模型 cpp 文件添加 test.cpp

```
testnet.load_param("test.param");
testnet.load_model("test.bin");
```

主要修改的包括 input 文件和输出的解析等

以及如果要测速度的话也要在这儿添加代码 修改 examples 下的 CMakeLists.txt,添加

```
add_executable(test test.cpp)
target_link_libraries(test ${NCNN_EXAMPLE_LINK_LIBRARIES})
```

在编译就 OK