

i-vizon trunk

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Code Area 89!

A warm welcome to my code base :)

I'm learning how effectively we can use the available computing units on the embedded platform.

In my exploration phase, I have written some C++ wrappers for ease of use and also given some tips where ever possible under the tag @TIPS:

For newbies out of college, I hope this will be a good starting point.

I have tried to introduce as many tools/libraries I can, to make an end to end solutions.

Willing to contribute or any queries

reach me at mageswaran1989@gmail.com with subject "i-vizon:OpenCL"

Folder Structure:

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```
common :      Common headers
utils  :      System utilities
docs   :      My notes
opencl :      Wrappers and try outs
gles   :      Wrappers and try outs
pcl    :      Wrappers and try outs
linux  :      Wrappers for linux APIs
c++11  :      For newbies
data   :      All data file needed for the exercises
```

General Structure:

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```
library_name/
  wrappers/
    inc/
    src/
    *.pri
  1.hello_world
    Qt/
      hello_world.pro
      hello_world.cpp
  2.exercise_two
  3.exercise_three
  4.exercise_four
  5.exercise_five
```

Naming Convention Followed:

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Point Cloud C++ coding guide lines

FileNames:

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file_name_one.h/.cpp

Compiler and IDE used:

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gcc (Ubuntu/Linaro 4.6.3-1ubuntu5) 4.6.3
QtCreator 2.8.1

Software Libraries/SDKs Used:

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```
1.OpenCL 1.1/1.2
2.OpenMP 3.0
3.OpenCV 2.4.8
4.Boost 1.54
5.Qt 4.8.0
6.PCL 1.7
```

I will leave the installation guide to Google.

Important:

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Code base is still in pre release stage, will take another few months to freeze the wrappers!
Right now it is upto you to explore the wrappers, till I generate Doxygen files.

ASSUMPTIONS:

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- *You are familiar with linux environment
- *You know to use QtCreator for C++ projects

To Start:

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- 1.Open the *.pro file using QtCreator and configure the output folder location.
- 2.In qtcreator press Ctrl+5 and under "Build Steps" add CONFIG+=linuxPC in "Additional Arguments" section
- 3.If you have libraries already installed, its time to RUN and explore :)