[LibSDN](#) / Readme First

You should first read [Conceptual Overview](#).

In the following instructions, replace YOURUSERNAME, YOURPROJECTNAME and YOURPROJECTSCRIPT as you see appropriate.

To start with the library:

1) Check out a copy of the library from:

- svn co svn+ssh://YOURUSERNAME@robo.stanford.edu/afs/cs/group/brain/libsdn/branch/redesign
    - This should be made to trunk once the redesign is complete.

2) In the local/ directory, create a local make file in the form of make.HOSTNAME

- You can find out the hostname using the "hostname" command on linux based machines
- The two most important directories to set are
    - OPENCV_HEADERS_PATH = /usr/local/include/opencv
    - OPENCV_LIB_PATH = /usr/local/lib
    - Set them to point to your local opencv installation
    - You will also need to install boost and Eigen in appropriate locations (/usr/include would be good)
- If you are working off robo or the AI clusters, you can use
    - BOOST_INCLUDE_PATH = /afs/cs.stanford.edu/u/jngiam/scratch/local/boost
    - EIGEN_PATH = /afs/cs.stanford.edu/u/jngiam/scratch/local/include
    - OPENCV_HEADERS_PATH = /afs/cs.stanford.edu/u/jngiam/scratch/local/include/opencv
    - OPENCV_LIB_PATH = /afs/cs.stanford.edu/u/jngiam/scratch/local/lib
        - The opencv in the above directories have been compiled for a x64 architecture.

3) With the local make file setup, you can proceed to compile by running make.

- This will generate all the object/archive files and create a few binary files in bin/
- Now, using the train binary in bin/, you can start running experiments!

If you want to develop more custom code that works with the stable blocks/networks:

1) You can create your own app in src/apps and modify src/apps/Makefile accordingly.

To develop your own blocks, networks or scripts:

2) Change directory to /src/lib/projects and make a copy of the template folder by

- svn cp template YOURPROJECTNAME

3) Next, goto YOURPROJECTNAME/scripts/

- Rename the templateScript to YOURPROJECTSCRIPT.h/.cc.

4) Also edit both the templateScript.h/.cc files

- Rename (find-replace) TemplateScript to YOURPROJECTSCRIPT.

5) Next, in the new directory you created for your project,

- Edit the Makefile and change the relevant lines. You should also rename templateScript to something relevant.

6) Next, register your project with the Make system by

- Editing src/lib/projects/Makefile and add your project details there accordingly.

7) Finally, register your script

- with the script registry at src/lib/registry/scriptRegistry.cc

After this, you are all set to run your own script using the provided main function.

Page last modified on January 15, 2010, at 03:49 PM by jngiam