My Configs Release

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TABLE OF CONTENTS

1	Python (python.rst)1.1 sbia workstation (py-sbia.rst)1.2 Windows machine (py-win.rst)1.3 old-notes (py-old.rst)	4
2	Bash config files (bash_config.rst) 2 2.1 SBIA Workstation (bash-sbia.rst) 2 2.2 Cygwin setup (bash-cygwin.rst) 3 2.3 Default bash config files (bash-defaults.rst) 5	23
3	Sublime Text Setup (sublime.rst) 6 3.1 SBIA Workstation (subl-sbia.rst) 6 3.2 Windows setup (subl-win.rst) 7 3.3 References (subl-ref.rst) 7 3.4 Default-settings (subl-defaults.rst) 7	55
4	R(R.rst)	37
5	Windows machine setup (windows.rst) 8 5.1 Autohotkey (win-ahk.rst) 8 5.2 MS Office Setups (win-office.rst) 9 5.3 XPS8900 Desktop settings (win-xps8900.rst) 9 5.4 ASUS laptop settings (win-asus.rst) 9 5.5 (Old) Thing to do on a new computer (win-old-notes.rst) 9	39 9(93
6	Trouble-shooting notes (trouble-shooting.rst) 9 6.1 ts-bash (ts-bash.rst) 9 6.2 ts-sublime (ts-sublime.rst) 10 6.3 ts-python (ts-python.rst) 10)(
7	Miscellaneous (misc.rst)107.1 cuda-installation (old) (misc-cuda-old.rst)107.2 SBIA workstation setup (misc-sbia-setups.rst)11)3

Personal note for keeping track of my computer configs, which I sync using symlinks.

Also enjoy being able to version control all of my rc files.

For source files, go to https://github.com/wtak23/configs/tree/master/source

Note:

- github has an excellent *file finder* system. Just type t at a repository to activate it (basically filters by filename you type in)
- type? at a github repos page to see all the cool keyboard shortcut it has

HTML last built: September 12, 2016

TABLE OF CONTENTS 1

2 TABLE OF CONTENTS

CHAPTER

ONE

PYTHON (PYTHON.RST)

Last updated: 08-27-2016 (22:35)

1.1 sbia workstation (py-sbia.rst)

Python setup - sbia-pc125 workstation

Contents

- symlink summary
- ipython setup
 - Content of ipython_kernel_config
- matplotlibrc
 - Content of matplotlibrc
- New symlink to sitecustomize.py
 - Current content of sitecustomize.py
 - what does sitecustomize.py do?
 - Current content of sitecustomize_spyder.py
- Changes with _original

1.1.1 symlink summary

```
SOURCE="${HOME}/Dropbox/git/configs/source/python/sbia"
  # === spyder template file ===
  ln -s "${SOURCE}/template.py" "${HOME}/.spyder2/"
  # === matplotlib rc ====
  MPL_TARGET=$(ipython -c "import matplotlib as mpl; from os.path import dirname; print dirname(mpl.mam
  ln -s "${SOURCE}/matplotlibrc" "${MPL_TARGET}"
  # === custom.js ====
10
  # (I need to remind myself what exactly this was for...)
11
  ln -s "${SOURCE}/custom.js" "${HOME}/.ipython/profile_default/static/custom/"
12
13
14
  # symlinks for ipython
15
  #-----#
16
  TARGET="${HOME}/.ipython"
17
```

```
# extensions directory
   ln -s "${SOURCE}/ipython/extensions" "${TARGET}"
20
21
   # ipython extension files (entire directory symlink'ed)
22
   ln -s "${SOURCE}/ipython/extensions" "${TARGET}"
23
24
   # startup files (entire directory symlink'ed)
25
   ln -s "${SOURCE}/ipython/profile_default/startup" "${TARGET}/profile_default"
26
27
   # global conf
28
   ln -s "${SOURCE}/ipython/profile_default/ipython_config.py" "${TARGET}/profile_default"
   # kernel file (gives me handle on default mplrc on jupyter notebook)
31
   ln -s "${SOURCE}/ipython/profile_default/ipython_kernel_config.py" "${TARGET}/profile_default"
32
33
   # forgot what these are, but hey, why not (can't hurt)
34
   ln -s "${SOURCE}/ipython/profile_default/ipython_qtconsole_config.py" "${TARGET}/profile_default"
35
   ln -s "${SOURCE}/ipython/profile_default/ipython_notebook_config.py" "${TARGET}/profile_default"
36
37
   #-----#
38
   # sitecustomize.py (for spyder and for general python)
39
   #----#
40
   # general python startup (I first needed to use this for building with Sphinx)
41
   ln -s "${HOME}/Dropbox/git/configs/source/python/sbia/sitecustomize.py" \
        "${HOME}/.local/lib/python2.7/site-packages"
43
44
  # spyder startup
45
  ln -s "${HOME}/Dropbox/git/configs/source/python/sbia/sitecustomize_spyder.py" \
46
        "${HOME}/anaconda2/lib/python2.7/site-packages/spyderlib/widgets/externalshell/sitecustomize.p
```

1.1.2 ipython setup

• https://ipython.org/ipython-doc/1/config/overview.html

Locating profile path

```
$ ipython locate
/home/takanori/.ipython

$ ipython locate profile
/home/takanori/.ipython/profile_default

$ ipython locate profile foo
/home/you/.ipython/profile_foo
```

Note: Why I bother with ipython_kernel_config.py

- to configure matplotlibre parameters in ipynb
- http://stackoverflow.com/questions/17230797/how-to-set-the-matplotlib-figure-default-size-in-ipython-notebook

Content of ipython_kernel_config

```
.. literalinclude:: sbia/ipython/profile_default/ipython_kernel_config.py
    :language: diff
    :linenos:
    :diff: sbia/ipython/profile_default/ipython_kernel_config_original.py
```

```
--- sbia/ipython/profile_default/ipython_kernel_config_original.py
   +++ sbia/ipython/profile_default/ipython_kernel_config.py
   @@ -406,3 +406,308 @@
   # Metadata dictionary, which serves as the default top-level metadata dict for
   # each message.
   # c.Session.metadata = {}
6
   +#------
   +# This block is my stuff
   +# http://stackoverflow.com/questions/21176731/automatically-run-matplotlib-inline-in-ipython-noteboo
10
11
   +c.InlineBackend.rc = {
12
       'figure.figsize': (6.0,4.0),
13
        'font.weight': 'bold',
14
       'axes.labelsize': 15.0,
15
       'axes.titlesize': 15.0,
16
       'axes.titleweight': 'bold',
17
       'legend.fontsize': 10.0,
18
       'xtick.labelsize': 10.0,
19
       'ytick.labelsize': 10.0,
20
       'figure.facecolor': 'white',
21
       'lines.linewidth': 3.0,
22
        'image.cmap': 'RdBu_r',
23
        'image.interpolation' : 'none',
24
        'axes.color_cycle': ['b', 'g', 'r', 'c', 'm', 'y', 'k', '#00FF00', '#008B8B', '#483D8B', '#F4A460',
25
       # 'savefig.dpi': 72,
26
        # 'figure.subplot.bottom': 0.125,
27
        # 'figure.edgecolor': 'white',
28
   +}
30
   +# c.InlineBackend.rc = {
31
         'figure.figsize': (10.0,8.0),
   +#
32
         'font.weight': 'bold',
   +#
33
          'axes.labelsize': 16.0,
   +#
          'axes.titlesize': 16.0,
   +#
35
   +#
          'axes.titleweight': 'bold',
36
   +#
          'legend.fontsize': 14.0,
37
   +#
          'xtick.labelsize': 14.0,
38
         'ytick.labelsize': 14.0,
   +#
39
         'figure.facecolor': 'white',
   +#
40
   +#
         'lines.linewidth': 3.0,
41
   +#
         # 'savefig.dpi': 72,
   +#
          # 'figure.subplot.bottom': 0.125,
43
          # 'figure.edgecolor': 'white',
   +#
44
   +# }
45
46
   +#-----
   +# here's a full list of options
   +# mpl.rc_params()
   +#
         RcParams({'agg.path.chunksize': 0,
50
                       'animation.avconv_args': [],
51
```

```
'animation.avconv_path': 'avconv',
         #
52
         #
                           'animation.bitrate': −1,
53
                           'animation.codec': 'mpeg4',
         #
54
                           'animation.convert_args': [],
55
                           'animation.convert_path': 'convert',
56
                           'animation.ffmpeg_args': [],
57
                           'animation.ffmpeg_path': 'ffmpeg',
58
                           'animation.frame_format': 'png',
59
                           'animation.mencoder_args': [],
60
                           'animation.mencoder_path': 'mencoder',
                           'animation.writer': 'ffmpeg',
                           'axes.axisbelow': False,
63
                           'axes.color_cycle': ['b', 'g', 'r', 'c', 'm', 'y', 'k'],
64
                           'axes.edgecolor': 'k',
65
                           'axes.facecolor': 'w',
66
                           'axes.formatter.limits': [-7, 7],
67
                           'axes.formatter.use_locale': False,
68
                           'axes.formatter.use_mathtext': False,
69
                           'axes.formatter.useoffset': True,
70
                           'axes.grid': False,
71
                           'axes.grid.which': 'major',
72.
                           'axes.hold': True,
73
                           'axes.labelcolor': 'k',
74
                           'axes.labelsize': 'medium',
                           'axes.labelweight': 'normal',
                           'axes.linewidth': 1.0,
77
                           'axes.titlesize': 'large',
78
                           'axes.titleweight': 'normal',
79
                           'axes.unicode_minus': True,
80
                           'axes.xmargin': 0.0,
81
82
                           'axes.ymargin': 0.0,
                           'axes3d.grid': True,
83
                           'backend': 'agg',
84
                           'backend.qt4': 'PyQt4',
85
                           'backend.qt5': 'PyQt5',
86
                           'backend_fallback': True,
87
                           'contour.negative_linestyle': 'dashed',
                           'datapath': '/home/takanori/anaconda/lib/python2.7/site-packages/matplotlib/mpl-
                           'docstring.hardcopy': False,
                           'examples.directory': '',
91
                           'figure.autolayout': False,
92
                           'figure.dpi': 80.0,
93
                           'figure.edgecolor': 'w',
94
95
                           'figure.facecolor': '0.75',
                           'figure.figsize': [8.0, 6.0],
96
                           'figure.frameon': True,
97
                           'figure.max_open_warning': 20,
98
                           'figure.subplot.bottom': 0.1,
99
                          'figure.subplot.hspace': 0.2,
100
                           'figure.subplot.left': 0.125,
102
                           'figure.subplot.right': 0.9,
                           'figure.subplot.top': 0.9,
103
                           'figure.subplot.wspace': 0.2,
104
                           'font.cursive': ['Apple Chancery',
105
                                               'Textile',
106
                                              'Zapf Chancery',
107
                                              'Sand',
                                               'cursive'],
109
```

```
'font.family': ['sans-serif'],
110
          #
                            'font.fantasy': ['Comic Sans MS',
111
                                                 'Chicago',
112
                                                 'Charcoal',
113
                                                 'ImpactWestern',
114
                                                 'fantasy'],
115
                            'font.monospace': ['Bitstream Vera Sans Mono',
116
                                                   'DejaVu Sans Mono',
117
                                                   'Andale Mono',
118
                                                   'Nimbus Mono L',
119
                                                   'Courier New',
                                                   'Courier',
121
                                                   'Fixed',
122
                                                   'Terminal',
123
                                                   'monospace'],
124
                            'font.sans-serif': ['Bitstream Vera Sans',
125
                                                    'DejaVu Sans',
126
127
                                                    'Lucida Grande',
                                                    'Verdana',
128
                                                    'Geneva',
129
                                                    'Lucid',
130
                                                    'Arial',
131
                                                    'Helvetica',
132
                                                    'Avant Garde',
133
                                                    'sans-serif'],
134
                            'font.serif': ['Bitstream Vera Serif',
135
                                              'DejaVu Serif',
136
                                               'New Century Schoolbook',
137
                                               'Century Schoolbook L',
138
                                              'Utopia',
139
                                               'ITC Bookman',
140
                                               'Bookman',
141
                                               'Nimbus Roman No9 L',
142
                                               'Times New Roman',
143
                                              'Times',
144
                                               'Palatino',
145
                                               'Charter',
                                               'serif'],
                            'font.size': 12.0,
148
                            'font.stretch': 'normal',
149
                            'font.style': 'normal',
150
                            'font.variant': 'normal',
151
                            'font.weight': 'normal',
152
153
                            'grid.alpha': 1.0,
154
                            'grid.color': 'k',
                            'grid.linestyle': ':',
155
                            'grid.linewidth': 0.5,
156
                            'image.aspect': 'equal',
157
                            'image.cmap': 'jet',
158
                            'image.interpolation': 'bilinear',
                            'image.lut': 256,
                            'image.origin': 'upper',
161
                            'image.resample': False,
162
                            'interactive': False,
163
                            'keymap.all_axes': ['a'],
164
                            'keymap.back': ['left', 'c', 'backspace'],
165
                            'keymap.forward': ['right', 'v'],
                            'keymap.fullscreen': ['f', 'ctrl+f'],
167
```

```
'keymap.grid': ['g'],
          #
168
          #
                            'keymap.home': ['h', 'r', 'home'],
169
                            'keymap.pan': ['p'],
170
                            'keymap.quit': ['ctrl+w', 'cmd+w'],
171
172
                            'keymap.save': ['s', 'ctrl+s'],
                            'keymap.xscale': ['k', 'L'],
173
                            'keymap.yscale': ['l'],
174
                            'keymap.zoom': ['o'],
175
                            'legend.borderaxespad': 0.5,
176
                            'legend.borderpad': 0.4,
177
                            'legend.columnspacing': 2.0,
178
                            'legend.fancybox': False,
179
                            'legend.fontsize': 'large',
180
                            'legend.framealpha': None,
181
                            'legend.frameon': True,
182
                            'legend.handleheight': 0.7,
183
                            'legend.handlelength': 2.0,
184
185
                            'legend.handletextpad': 0.8,
                            'legend.isaxes': True,
186
                            'legend.labelspacing': 0.5,
187
                            'legend.loc': 'upper right',
188
                            'legend.markerscale': 1.0,
189
                            'legend.numpoints': 2,
190
                            'legend.scatterpoints': 3,
191
                            'legend.shadow': False,
192
                            'lines.antialiased': True,
193
                            'lines.color': 'b',
194
                            'lines.dash_capstyle': 'butt',
195
                            'lines.dash_joinstyle': 'round',
196
                            'lines.linestyle': '-',
197
                            'lines.linewidth': 1.0,
198
                            'lines.marker': 'None',
199
                            'lines.markeredgewidth': 0.5,
200
                            'lines.markersize': 6.0,
201
                            'lines.solid_capstyle': 'projecting',
202
                            'lines.solid_joinstyle': 'round',
203
                            'mathtext.bf': 'serif:bold',
                            'mathtext.cal': 'cursive',
                            'mathtext.default': 'it',
206
                            'mathtext.fallback to cm': True,
207
                            'mathtext.fontset': 'cm',
208
                            'mathtext.it': 'serif:italic',
209
                            'mathtext.rm': 'serif',
210
                            'mathtext.sf': 'sans\\-serif',
211
212
                            'mathtext.tt': 'monospace',
                            'nbagg.transparent': True,
213
                            'patch.antialiased': True,
214
                            'patch.edgecolor': 'k',
215
                            'patch.facecolor': 'b',
216
                            'patch.linewidth': 1.0,
218
                            'path.effects': [],
                            'path.simplify': True,
219
                            'path.simplify_threshold': 0.111111111111111,
220
                            'path.sketch': None,
221
                            'path.snap': True,
222
223
                            'pdf.compression': 6,
224
                            'pdf.fonttype': 3,
225
                            'pdf.inheritcolor': False,
```

```
'pdf.use14corefonts': False,
226
         #
                           'pgf.debug': False,
227
                           'pgf.preamble': [],
228
                           'pgf.rcfonts': True,
                           'pgf.texsystem': 'xelatex',
230
                           'plugins.directory': '.matplotlib_plugins',
231
                           'polaraxes.grid': True,
232
                           'ps.distiller.res': 6000,
233
                           'ps.fonttype': 3,
234
                           'ps.papersize': 'letter',
                           'ps.useafm': False,
                           'ps.usedistiller': False,
                           'savefig.bbox': None,
238
                           'savefig.directory': '~',
239
                           'savefig.dpi': 100.0,
240
                           'savefig.edgecolor': 'w',
241
                           'savefig.facecolor': 'w',
242
243
                           'savefig.format': 'png',
                           'savefig.frameon': True,
244
                           'savefig.jpeg_quality': 95,
245
                           'savefig.orientation': 'portrait',
246
                           'savefig.pad_inches': 0.1,
247
                           'savefig.transparent': False,
248
                           'svg.fonttype': 'path',
                           'svg.image_inline': True,
                           'svq.image_noscale': False,
251
                           'text.antialiased': True,
252
                           'text.color': 'k',
253
                           'text.dvipnghack': None,
254
                           'text.hinting': True,
255
256
                           'text.hinting_factor': 8,
257
                           'text.latex.preamble': [],
                           'text.latex.preview': False,
258
                           'text.latex.unicode': False,
259
                           'text.usetex': False,
260
                           'timezone': 'UTC',
261
                           'tk.window_focus': False,
                           'toolbar': 'toolbar2',
                           'verbose.fileo': 'sys.stdout',
264
                           'verbose.level': 'silent',
265
                           'webagg.open_in_browser': True,
266
                           'webagg.port': 8988,
267
                           'webagg.port_retries': 50,
                           'xtick.color': 'k',
269
                           'xtick.direction': 'in',
270
                           'xtick.labelsize': 'medium',
271
                           'xtick.major.pad': 4.0,
272
                           'xtick.major.size': 4.0,
273
                           'xtick.major.width': 0.5,
274
                           'xtick.minor.pad': 4.0,
                           'xtick.minor.size': 2.0,
                           'xtick.minor.width': 0.5,
277
                           'ytick.color': 'k',
278
                           'ytick.direction': 'in',
279
                           'ytick.labelsize': 'medium',
280
281
                           'ytick.major.pad': 4.0,
                           'ytick.major.size': 4.0,
283
                           'ytick.major.width': 0.5,
```

```
'ytick.minor.pad': 4.0,
284
       #
                      'ytick.minor.size': 2.0,
285
                      'ytick.minor.width': 0.5}
286
288
   +# ... Any other configurables you want to set
289
   +c.InteractiveShellApp.matplotlib = "inline"
290
   +# c.InteractiveShellApp.matplotlib = "qt4"
291
   +#-----#
   +# change default browser
   +# https://ipython.org/ipython-doc/2/config/options/notebook.html
295
296
   +# http://stackoverflow.com/questions/15632663/launch-ipython-notebook-with-selected-browser
   +# http://stackoverflow.com/questions/16704588/changing-browser-for-ipython-notebook-from-system-defo
   +# http://stackoverflow.com/questions/6042335/calling-chrome-web-browser-from-the-webbrowser-get-in-p
   +# # import webbrowser
301
   +# # webbrowser.register('firefox', None, webbrowser.GenericBrowser(u'/usr/bin/firefox \$s'))
302
   +# # c.NotebookApp.browser = u'/usr/bin/firefox %s'
303
   +# c.NotebookApp.browser = u'firefox'
   +# # NotebookApp.browser : Unicode
   +import pandas as pd
308
  +# pd.set_option('display.max_rows', 3)
309
  +# pd.set_option('precision',4)
310
  +pd.set_option('display.max_columns',500)
```

1.1.3 matplotlibrc

Content of matplotlibro

```
.. literalinclude:: sbia/matplotlibrc
    :language: diff
    :diff: sbia/matplotlibrc_original
    :linenos:
```

```
--- sbia/matplotlibrc_original
+++ sbia/matplotlibrc

@@ -66,7 +66,7 @@

# you if backend_fallback is True
```

```
#backend_fallback: True
   -#interactive : False
   +interactive : True
    #toolbar
                 : toolbar2
                               # None | toolbar2 ("classic" is deprecated)
                 : UTC
                               # a pytz timezone string, e.g., US/Central or Europe/Paris
    #t.imezone
10
11
   @@ -78,7 +78,7 @@
12
   ### LINES
13
   # See http://matplotlib.org/api/artist_api.html#module-matplotlib.lines for more
   # information on line properties.
   -#lines.linewidth : 1.0
                                # line width in points
   +lines.linewidth : 2.5 #1.0 # line width in points
17
   #lines.linestyle : -
                               # solid line
18
   #lines.color
                     : blue
                              # has no affect on plot(); see axes.color_cycle
19
   #lines.marker : None
                                # the default marker
20
   @@ -139,14 +139,14 @@
21
22
   #font.family
                        : sans-serif
   #font.style
23
                        : normal
   #font.variant
                        : normal
24
   -#font.weight
                        : medium
2.5
   +font.weight
                       : bold #medium
26
   #font.stretch
                       : normal
27
   # note that font.size controls default text sizes. To configure
   # special text sizes tick labels, axes, labels, title, etc, see the rc
   # settings for axes and ticks. Special text sizes can be defined
30
   # relative to font.size, using the following values: xx-small, x-small,
31
   # small, medium, large, x-large, xx-large, larger, or smaller
32
   -#font.size
                       : 12.0
33
   +font.size
                       : 20.0 #12.0 #<- controls the "displaytip size"
34
                        : Bitstream Vera Serif, New Century Schoolbook, Century Schoolbook L, Utopia,
35
   #font.serif
                        : Bitstream Vera Sans, Lucida Grande, Verdana, Geneva, Lucid, Arial, Helvetica
   #font.sans-serif
36
   #font.cursive
                        : Apple Chancery, Textile, Zapf Chancery, Sand, cursive
37
   @@ -235,14 +235,14 @@
38
   # default fontsizes for ticklabels, and so on. See
39
   # http://matplotlib.org/api/axes_api.html#module-matplotlib.axes
40
   #axes.hold
                 : True # whether to clear the axes by default on
41
   -#axes.facecolor
                       : white # axes background color
   +axes.facecolor
                      : white # axes background color
43
   #axes.edgecolor
                      : black # axes edge color
: 1.0 # edge linewidth
44
   -#axes.linewidth
45
   -#axes.grid
                        : False
                                 # display grid or not
46
47
   -#axes.titlesize
                       : large # fontsize of the axes title
   -#axes.labelsize
                        : medium # fontsize of the x any y labels
49
   -#axes.labelweight
                        : normal # weight of the x and y labels
   -#axes.labelcolor
                        : black
50
   +axes.linewidth
                       : 1.5 #1.0
                                     # edge linewidth
51
   +axes.grid
                       : False # display grid or not
52
                      : 18.0 #large # fontsize of the axes title
   +axes.titlesize
53
   +axes.labelsize
                      : 10.0 #medium # fontsize of the x any y labels
   +axes.labelweight : bold #normal # weight of the x and y labels
   +axes.labelcolor : black #black # <- controls xlabel and ylabel font color
56
   #axes.axisbelow
                       : False # whether axis gridlines and ticks are below
57
                                  # the axes elements (lines, text, etc)
58
59
   @@ -264,7 +264,8 @@
60
   #axes.unicode_minus : True
                                   # use unicode for the minus symbol
                                  # rather than hyphen. See
```

```
# http://en.wikipedia.org/wiki/Plus_and_minus_signs#Charater_codes
63
   -#axes.color_cycle
                        : b, g, r, c, m, y, k # color cycle for plot lines
64
   +#| this gives warning that color cyle is deprecated...
65
                          : b, r, g, m, c, y, k # color cycle for plot lines
   +# axes.color_cycle
66
67
                                                  # as list of string colorspecs:
                                                  # single letter, long name, or
68
                                                  # web-style hex
69
   @@ -283,7 +284,7 @@
70
    #xtick.major.pad
                           : 4
                                    # distance to major tick label in points
71
    #xtick.minor.pad
                                    # distance to the minor tick label in points
                           : 4
72
    #xtick.color
                           : k
                                    # color of the tick labels
   -#xtick.labelsize
                           : medium # fontsize of the tick labels
   +xtick.labelsize
                          : 10.0 #medium # fontsize of the tick labels
75
    #xtick.direction
                          : in
                                    # direction: in, out, or inout
76
77
    #ytick.major.size
                           : 4
                                    # major tick size in points
78
   @@ -293,7 +294,7 @@
79
    #ytick.major.pad
                           : 4
                                    # distance to major tick label in points
80
    #ytick.minor.pad
                           : 4
                                    # distance to the minor tick label in points
81
                                    # color of the tick labels
    #ytick.color
                           : k
82
   -#ytick.labelsize
                          : medium # fontsize of the tick labels
83
   +ytick.labelsize
                          : 10.0 #medium # fontsize of the tick labels
84
                         : in
    #ytick.direction
                                    # direction: in, out, or inout
85
   @@ -308,7 +309,7 @@
88
                                    # legend, else a rectangle
89
    #legend.isaxes
                           : True
90
    #legend.numpoints
                           : 2
                                    # the number of points in the legend line
91
   -#legend.fontsize
                           : large
92
93
   +legend.fontsize
                          : 16.0 #large
    #legend.borderpad
                           : 0.5 # border whitespace in fontsize units
94
    #legend.markerscale
                           : 1.0
                                    # the relative size of legend markers vs. original
95
    # the following dimensions are in axes coords
96
   @@ -325,13 +326,13 @@
97
98
    ### FIGURE
    # See http://matplotlib.org/api/figure_api.html#matplotlib.figure.Figure
   -#figure.figsize : 8, 6 # figure size in inches
101
   +figure.figsize : 10, 8 #8, 6 # figure size in inches
102
    #figure.dpi
                      : 80
                                # figure dots per inch
103
   -#figure.facecolor: 0.75
                                 # figure facecolor; 0.75 is scalar gray
104
   +figure.facecolor : white #0.75
105
                                      # figure facecolor; 0.75 is scalar gray
    #figure.edgecolor : white
106
                                 # figure edgecolor
107
    #figure.autolayout : False
                                # When True, automatically adjust subplot
                                 # parameters to make the plot fit the figure
108
   -#figure.max_open_warning : 20 # The maximum number of figures to open through
109
   +#figure.max_open_warning : 12  # The maximum number of figures to open through
110
                                    # the pyplot interface before emitting a warning.
111
                                    # If less than one this feature is disabled.
112
113
   @@ -346,8 +347,8 @@
114
115
    ### IMAGES
116
    #image.aspect : equal
                                       # equal | auto | a number
117
   -#image.interpolation : bilinear # see help(imshow) for options
118
119
   -#image.cmap : jet
                                       # gray | jet etc...
   +image.interpolation : none # see help(imshow) for options
```

```
+image.cmap : RdBu_r #jet
                                              # gray | jet etc...
121
                  : 256
                                       # the size of the colormap lookup table
    #image.lut
122
    #image.origin : upper
                                       # lower | upper
123
    #image.resample : False
124
   @@ -456,17 +457,17 @@
125
   # Customize these settings according to your needs.
126
    # Leave the field(s) empty if you don't need a key-map. (i.e., fullscreen : '')
127
129
   -#keymap.fullscreen : f
                                          # toggling
   -#keymap.home : h, r, home
                                          # home or reset mnemonic
130
   +keymap.fullscreen : f
                                         # toggling
131
   +keymap.home : h, r, home
                                        # home or reset mnemonic
132
   #keymap.back : left, c, backspace # forward / backward keys to enable
133
                                         # left handed quick navigation
   #keymap.forward : right, v
134
   -#keymap.pan : p
                                         # pan mnemonic
135
   +keymap.pan : p
                                         # pan mnemonic
136
    #keymap.zoom : o
                                          # zoom mnemonic
137
   #keymap.save : s
                                          # saving current figure
138
   #keymap.quit : ctrl+w, cmd+w
                                         # close the current figure
139
                                         # switching on/off a grid in current axes
   -#keymap.grid : g
140
   -#keymap.yscale : 1
                                         # toggle scaling of y-axes ('log'/'linear')
142
   -#keymap.xscale : L, k
                                         # toggle scaling of x-axes ('log'/'linear')
   +keymap.grid : g
                                        # switching on/off a grid in current axes
143
                                       # toggle scaling of y-axes ('log'/'linear')
   +keymap.yscale : 1
144
   +keymap.xscale : L, k
                                       # toggle scaling of x-axes ('log'/'linear')
145
                                          # enable all axes
   #keymap.all_axes : a
146
147
    # Control location of examples data files
148
   @@ -491,3 +492,7 @@
   #animation.convert_path: 'convert' # Path to ImageMagick's convert binary.
150
                                        # On Windows use the full path since convert
151
                                        # is also the name of a system tool.
152
153
   +# my stuffs below
   +#----
   +#axes.titleweight=bold
```

1.1.4 New - symlink to sitecustomize.py

Basically stuffs I want python to run at program startup (in case I am not using ipython)

Current content of sitecustomize.py

```
.. literalinclude:: sbia/sitecustomize.py
:language: python
```

```
# # http://stackoverflow.com/questions/9942594/unicodeencodeerror-ascii-codec-cant-encode-character-
# # http://masasuzu.hatenablog.jp/entry/20110313/1299997912
# import sys

# # | reload is somehow needed to get ``setdefaultencoding`` method
# # | http://stackoverflow.com/questions/2276200/changing-default-encoding-of-python
# reload(sys)

# # default is 'ascii', which raises EncodingError with some programs that uses UTF-8.
# sys.setdefaultencoding('UTF8')
```

what does sitecustomize.py do?

- http://stackoverflow.com/questions/10693706/creating-a-secondary-site-packages-directory-and-loading-packages-from-pth-fil
- http://masasuzu.hatenablog.jp/entry/20110313/1299997912
- http://nedbatchelder.com/blog/201001/running_code_at_python_startup.html
 - this one was the most informative

Current content of sitecustomize_spyder.py

```
.. literalinclude:: sbia/sitecustomize_spyder.py
    :language: diff
    :linenos:
    :diff: sbia/sitecustomize_spyder_original.py
```

1.1.5 Changes with _original

Use diff or better yet, colordiff to see the changes I made

1.2 Windows machine (py-win.rst)

Note: (from old notes)

1.2.1 pip installs

Below may be incomplete...

```
pip install bctpy --user
pip install nimfa --user
pip install nilearn --user
pip install seaborn --user
pip install numpydoc --user
pip install sphinx_rtd_theme --user
```

1.2.2 Rollback Sphinx to Version 1.3.5

To get copybutton. js working, among bunch of other things.

Below ran in cygwin

```
git clone https://github.com/sphinx-doc/sphinx
cd sphinx
git checkout tags/1.3.5
python setup.py install --user
```

1.3 old-notes (py-old.rst)

Important: Below are my some setups I ran a while ago...not sure I'll use them in the future but kept as referece.

```
Contents

• Feb 24, 2016
• Stuffs installed after 03-30-2016

- Bleeding edge version of lasagne (04/11/2016)

- Reupdate theano to 0.8 (04/1/2016)

• Stuffs installed (11/30/2015)

• moduel-install: VERY old modules install

- ./module-installs/install_modules.sh

- ./module-installs/pyinstall.sh

- ./module-installs/spams_install.sh

- ./module-installs/tak_install.sh
```

1.3.1 Feb 24, 2016

Updating keras via pip messed up my spyder config (gets the "kernel died unexpectedly")...so did a reinstall of spyder as follows:

```
cd ~/Downloads
   bash Anaconda-2.3.0-Linux-x86_64.sh
   cd ~/Dropbox/git/configs_master/sbia-pc125-cinn/python/module-installs
   ./install_modules.sh
   ./spams_install.sh
   pip install bctpy --user
   yes | pip install theano --user
   yes | pip install nimfa --user
12
   # install keras
13
   cd ~/work-local/external-python-modules/keras
   python setup.py install #--user
14
15
16
   # mpl setup
   cp ~/Dropbox/git/configs_master/sbia-pc125-cinn/python/matplotlibrc ~/anaconda/lib/python2.7/site-pa
```

Also had to turn off memory_profiler in

Note: cudamat install procedure skipped...if needed, see my evernote comments on how to do this.

1.3.2 Stuffs installed after 03-30-2016

On local machine

```
# http://lasagne.readthedocs.org/en/latest/user/installation.html

#pip install Lasagne==0.1

# ^^^appears not to contain Lasagne/dnn.py...installed bleeding edge via github repos

# 04-03-2016 (01:22)

cd /home/takanori/work-local/external-python-modules/
git clone https://github.com/Lasagne/Lasagne

cd Lasagne

python setup.py install

# derp another issue...above requires cuDNN
```

```
#^ solved foloowing instructions in http://deeplearning.net/software/theano/library/sandbox/cuda/dnn
# added these to my .bashrc file
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/home/takanori/data/cuda/lib64
export CPATH=$CPATH:/home/takanori/data/cuda/include
export LIBRARY_PATH=$LD_LIBRARY_PATH:/home/takanori/data/cuda/lib64

pip install git+https://github.com/dnouri/nolearn.git@master#egg=nolearn==0.7.git
```

On the server end

Getting junk to work on the server 04-03-2016 (22:48)

tabulate package kept complaining, so did this:

```
pip install --upgrade tabulate --user

# then copy and paste these from sftp://watanabt@cbica-cluster.uphs.upenn.edu/cbica/home/watanabt/.lc
sftp://watanabt@cbica-cluster.uphs.upenn.edu/cbica/home/watanabt/python_modules/tabulate-0.7.5.dist-sftp://watanabt@cbica-cluster.uphs.upenn.edu/cbica/home/watanabt/python_modules/tabulate.py
sftp://watanabt@cbica-cluster.uphs.upenn.edu/cbica/home/watanabt/python_modules/tabulate.pyc
```

Bleeding edge version of lasagne (04/11/2016)

```
pip install --upgrade https://github.com/Theano/Theano/archive/master.zip --user
pip install --upgrade https://github.com/Lasagne/Lasagne/archive/master.zip --user
```

Reupdate theano to 0.8 (04/1/2016)

When working on nolearn, i got the error

```
runfile('/home/takanori/Dropbox/work/sbia_work/python/analysis/gen/rev_nolearn_dnouri_0401_demo1.py',
Reloaded modules: tmp0pJ_Wq.5d8bc519f141ed95f4115e5e8c5d9ef9, tmp0pJ_Wq
Traceback (most recent call last):

File "<ipython-input-145-fa2aa542ecbe>", line 1, in <module>
    runfile('/home/takanori/Dropbox/work/sbia_work/python/analysis/gen/rev_nolearn_dnouri_0401_demo1

File "/home/takanori/anaconda/lib/python2.7/site-packages/spyderlib/widgets/externalshell/sitecuste
    execfile(filename, namespace)

File "/home/takanori/anaconda/lib/python2.7/site-packages/spyderlib/widgets/externalshell/sitecuste
    builtins.execfile(filename, *where)
```

```
File "/home/takanori/Dropbox/work/sbia_work/python/analysis/gen/rev_nolearn_dnouri_0401_demo1.py",
    net0.fit(X,y)

File "/home/takanori/anaconda/lib/python2.7/site-packages/nolearn/lasagne/base.py", line 527, in f:
    self.initialize()

File "/home/takanori/anaconda/lib/python2.7/site-packages/nolearn/lasagne/base.py", line 367, in in
    self.y_tensor_type,

File "/home/takanori/anaconda/lib/python2.7/site-packages/nolearn/lasagne/base.py", line 504, in _c
    allow_input_downcast=True,

File "/home/takanori/anaconda/lib/python2.7/site-packages/theano/compile/function.py", line 290, in
    "In() instances and tuple inputs trigger the old "

NotImplementedError: In() instances and tuple inputs trigger the old semantics, which disallow using
```

According to this link, I need to update Theano.

So on my local machine, did

```
pip install --upgrade --no-deps theano
```

1.3.3 Stuffs installed (11/30/2015)

```
# these were installed to get graph printouts in theano to work
conda install pydot
conda install graphviz
```

1.3.4 moduel-install: VERY old modules install

Note: moduel-install — contains my own module installer scripts when I first started using Python.

So yeah, I was a rookie then, so take whatever I did with a huge grain of salt.

./module-installs/install_modules.sh

```
#!/usr/bin/env bash
  yes | conda install mayavi
  yes | pip install seaborn
  yes | conda install wxpython
  yes | pip install pydicom
  yes | pip install visvis
   # yes | pip install ipywidgets # <- seems to screw up things
  yes | pip install mpldatacursor
  yes | pip install units # for basic_units module
10
  #=== Continuum conda acceleraator ====#
  yes | conda update conda
  yes | conda install accelerate
13
  yes | conda install iopro
14
```

```
yes | pip install line-profiler
   yes | pip install -U memory_profiler
17
18
   # 10/01/2015
19
   yes | pip install ipdb
20
21
   yes | pip install skdata
22
23
24
   25
   dirpath=/home/takanori/work-local/external-python-modules
26
27
   # http://www.cyberciti.biz/faq/bash-for-loop-array/
28
   dirList=('cvxopt'
29
            'cvxpy'
30
            'dipy'
31
            'hyperopt'
32
            'hyperopt-sklearn'
33
            'nibabel'
34
            'nilearn'
35
            'nipy'
            'proxTV'
37
            'pyqtgraph'
38
            'vispy'
39
            'xy_python_utils')
40
   for i in "${dirList[@]}"; do
41
     # echo $i
42
      # echo "cd ${dirpath}/${i}"
43
     cd ${dirpath}/${i}
      # echo "Now dir: " $ (pwd)
45
     python setup.py build
46
     python setup.py install
47
   done
```

./module-installs/pyinstall.sh

```
#!/usr/bin/env bash
   dirpath=/home/takanori/work-local/external-python-modules
2
   # http://www.cyberciti.biz/faq/bash-for-loop-array/
   dirList=('cvxopt'
             'cvxpy'
6
             'dipy'
             'nibabel'
8
             'nilearn'
9
             'nipy'
10
             'proxTV'
11
12
             'pyqtgraph'
             'vispy'
13
14
             'xy_python_utils')
   for i in "${dirList[@]}"; do
15
      # echo $i
16
      # echo "cd ${dirpath}/${i}"
17
18
      cd ${dirpath}/${i}
       # echo "Now dir: " $ (pwd)
19
20
      python setup.py build
      python setup.py install
21
```

```
22 done
```

./module-installs/spams_install.sh

```
cd /home/takanori/work-local/external-python-modules/spams-python
python setup.py install --prefix=/home/takanori/anaconda/lib/python2.7/site-packages
```

./module-installs/tak install.sh

```
#!/usr/bin/env bash
   yes | conda install mayavi
   yes | pip install seaborn
   yes | pip install units # for basic_units module
5
   yes | pip install mpldatacursor
6
   yes | conda install wxpython
   yes | pip install pydicom
   yes | pip install visvis
11
   # yes | pip install ipywidgets # <- seems to screw up things
12
13
   #==== Continuum conda acceleraator ====#
14
   yes | conda update conda
15
   yes | conda install accelerate
   yes | conda install iopro
17
18
   yes | pip install line-profiler
19
   yes | pip install -U memory_profiler
20
21
   # 10/01/2015
22
23
   yes | pip install ipdb
   25
   # notebook extensions (this also seem to screw things up....)
26
   # yes | pip install jupyter_core
27
   # yes | pip install notebook
28
   # yes | conda install jupyter
   # yes | pip install feedparser
   # yes | pip install boilerpipe
31
32
   # trying to build from https://github.com/ipython-contrib/IPython-notebook-extensions
33
   # prerequiresites
34
   # **** Tak: NOPE, THIS DIDNT WORK EITHER....GIVE UP ON NBEXTENSIONS...
35
   # yes | pip install jupyter_core
   # yes | conda install jupyter
   # yes | conda install patchelf
   # yes | conda install psutil
39
40
   #| then do this
41
   # takanori@sbia-pc125 ~/work-local/external-python-modules $ conda build IPython-notebook-extensions
42
   #----#
   # for now, following these two steps allows me to use
   # https://github.com/spyder-ide/spyder/issues/2626
45
   # https://github.com/spyder-ide/spyder/issues/2626
```

CHAPTER

TWO

BASH CONFIG FILES (BASH_CONFIG.RST)

Github

2.1 SBIA Workstation (bash-sbia.rst)

Contents

- Symlinks
- bashrc contents
- gitconfig content

2.1.1 Symlinks

Laste updated: 08-28-2016 (00:36)

```
SOURCE="${HOME}/Dropbox/git/configs/source/bash_config/sbia-pc-125"

ln -s "${SOURCE}/.bashrc" ~/.bashrc
ln -s "${SOURCE}/.bash_aliases" ~/.bash_aliases

# git configs
ln -s "${SOURCE}/.gitconfig" ~/.gitconfig
ln -s "${SOURCE}/.gitignore" ~/.gitignore

# to colorize my $less command
ln -s "${SOURCE}/.lessfilter" ~/.lessfilter
```

2.1.2 bashrc contents

Github

```
.. literalinclude:: ./sbia-pc-125/.bashrc
:language: bash
:linenos:
```

```
alias bsource="source ${HOME}/.bashrc" # bash-source
   # Set env-vars
   # http://serverfault.com/questions/606/what-is-the-best-way-to-set-an-environmet-variable-in-bashrc
10
   #-----
11
     _bookmark_ENVVARS___() { echo "I'm just a bookmark"; }
12
    # added by Anaconda2 4.0.0 installer
13
    export PATH="/home/takanori/anaconda2/bin:$PATH"
15
    export CUDA_ROOT=/usr/local/cuda-6.5
16
17
    export PATH=$PATH:/home/takanori/mybin/Slicer-4.4.0-linux-amd64
18
    export PATH=$PATH:/home/takanori/mybin/ImageJ
19
20
    export PATH=$PATH:~/mybin/itksnap-3.2.0-20141023-Linux-x86_64/bin/
21
    export PATH=$PATH:/usr/local/cuda-6.5/bin
22
    export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/local/cuda-6.5/lib64
23
24
    # BLAS/LAPACK Setups
25
    export BLAS=/usr/local/lib/libopenblas.a
26
    export LAPACK=/usr/local/lib/libopenblas.a
    export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/local/lib/
29
    # https://bbs.archlinux.org/viewtopic.php?id=180833
30
    export GLPATH=/usr/lib make
31
32
    # python imports
33
    export PYTHONPATH=/home/takanori/Dropbox/work/external-pymodules
35
    export PYTHONPATH=$PYTHONPATH:/home/takanori/Dropbox/work/sbia_work/python/modules
36
    # LD LIBRARY PATH=/usr/local/MATLAB/R2013a/sys/os/qlnxa64:/usr/local/MATLAB/R2013a/bin/qlnxa64
37
38
39
    # matlab
      MLM_LICENSE_FILE=27000@olympus.uphs.upenn.edu
42.
      # export PATH=$PATH:/usr/local/MATLAB/R2014b/bin
43
      export PATH=$PATH:/usr/local/MATLAB/R2013a/bin
44
      export PATH=$PATH:~/abin
45
      alias m2014='/usr/local/MATLAB/R2014b/bin/matlab &'
46
47
48
    #_____#
    # Pyspark
49
50
      export PATH=$PATH:/home/takanori/mybin/spark-2.0.0-bin-hadoop2.7/bin
51
52
      # include pyspark to my python module 07-31-2016 (16:17)
      export PYTHONPATH=$PYTHONPATH:/home/takanori/mybin/spark-2.0.0-bin-hadoop2.7/python/
      export PYTHONPATH=$PYTHONPATH:/home/takanori/mybin/spark-2.0.0-bin-hadoop2.7/python/pyspark
55
56
    #-----#
57
    # to get deepnet working
58
    # https://github.com/nitishsrivastava/deepnet/blob/master/INSTALL.txt
59
      export CUDA_ROOT=/usr/local/cuda-6.5
      export CUDA_BIN=/usr/local/cuda-6.5/bin
```

```
export CUDA LIB=/usr/local/cuda-6.5/lib64
63
      export PATH=${CUDA_BIN}:$PATH
64
      export LD_LIBRARY_PATH=${CUDA_LIB}:$LD_LIBRARY_PATH
65
66
      # protocole buffer (type $ which protoc)
67
      export PATH=/usr/local/bin/protoc: $PATH
68
69
      # (3) SET ENVIRONMENT VARIABLES
70
      export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/home/takanori/work-local/external-python-modules/deepne
71
      export PYTHONPATH=$PYTHONPATH:/home/takanori/work-local/external-python-modules/deepnet
72
73
     #-----#
74
     # mozi stuff
75
     # https://github.com/hycis/Mozi
76
     #----#
77
      # export PYTHONPATH=~/work-local/external-python-modules/Mozi:$PYTHONPATH
78
      # export MOZI_DATA_PATH=~/data/mozi/data
79
      # export MOZI_SAVE_PATH=~/data/mozi/database
80
      # export MOZI_DATABASE_PATH=~/data/mozi/save
81
      # export PYLEARN2 DATA PATH=/home/takanori/data/deep learning/pylearn2
82
83
   #-----#
84
   # alias to change default options of a command
85
   #-----#
     __bookmark_default_options____() { echo "" ; }
    # alias less='less -r'  # raw control characters
alias whence='type -a'  # where, of a sort
88
    alias whence='type -a'
                                   # where, of a sort
89
    alias grep='grep -P --color=always' # use perl engine as default
90
    alias egrep='egrep --color=always' # show differences in colour
    alias fgrep='fgrep --color=always' # show differences in colour
92
93
     # Some shortcuts for different directory listings
94
     #alias ls='ls -hF --color=tty'
                                                 # classify files in colour
95
    alias ls='ls --color -h --group-directories-first' # http://superuser.com/questions/1 ♦9537/unix-ls
96
    alias dir='ls --color=auto --format=vertical'
97
    alias vdir='ls --color=auto --format=long'
98
    alias ll='ls -l'
                                             # long list
                                             # all but . and ..
    alias la='ls -A'
    alias l='ls -CF'
101
     # alias ipynb='ipython notebook --browser=/usr/bin/firefox'
102
103
    alias gcc='/sbia/sbiasfw/external/gcc/4.7.1/bin/gcc'
104
105
106
   #-----#
107
   # General convenience commands (most will go here)
   #-----#
108
      _bookmark_convenience____() { echo ""; }
109
    alias cpucheck='ps uU takanori --sort %cpu'
110
    alias cpucheck2='ps aux --sort %cpu'
111
112
     #-----
                  _____#
113
    # diskspace
114
115
    alias dspace='du -h --max-depth=1'
116
    alias dspace2='du --max-depth=1 | sort -n | cut -f2- | xargs du -hs'
117
    alias dspace3='du --max-depth=1 | sort -n | cut -f2- | xargs du -ahs'
118
    #http://stackoverflow.com/questions/1412423/display-only-files-and-folders-that-are-symbolic-links
120
```

```
alias ls_sym='ls -l $(find ./ -maxdepth 1 -type l -print)'
121
122
     #http://stackoverflow.com/questions/17066250
123
    alias print_time='echo $(date +"%Y-%m-%d_%H:%M:%S")'
124
125
     #http://stackoverflow.com/questions/7110119 (history with no line-numbers)
126
    alias hist_nonum='history | cut -c 8-'
127
128
    tw_print_function_name(){
129
      #-----#
130
      # print function names defined here
131
      # (since these don't show up in $ alias
132
      #-----#
133
      # http://stackoverflow.com/questions/1184268/unix-sort-treatment-of-underscore-character
134
      # LC_COLLATE=C will make underscore sorted as well
135
      # (grep looks from () followed by {
136
      # sed shaves off all the last character following "()" bracket
137
      # http://stackoverflow.com/questions/3675169/how-to-shave-off-last-character-using-sed
138
      cat ~/.bashrc | grep "\(\)(?=\{)" | env LC_COLLATE=C sort -f | \
139
          sed "s/().*$/()/" | stripcolors
140
141
142
    tw_csvhead() {
143
      head -1 $1 | tr ',' '\n'
144
145
146
   #-----#
147
   # ssh
148
   149
      _bookmark_ssh____() { echo "" ; }
150
    alias tak='ssh takanori@takanori.eecs.umich.edu'
151
    alias caen='ssh takanori@login.engin.edu'
152
    alias itd='ssh takanori@login.engin.edu'
153
    alias newberry='ssh takanori@newberry.eecs.umich.edu'
154
    alias itd='ssh -Y -l takanori stat.itd.umich.edu'
155
    alias sbia='ssh -Y -l watanabt cbica-cluster.uphs.upenn.edu'
156
157
   #-----#
158
   # run in ba
159
   #-----#
160
      _bookmark_background____() { echo ""; }
161
    alias gitk1='gitk &'
162
    alias spyder='spyder --new-instance &'
163
164
    alias matlab1='matlab &'
165
166
   # my "go" aliases to move around frequently used directories
167
   #______
168
     __bookmark_go____() { echo ""; }
    alias godrop='cd ~/Dropbox'
170
    alias gogit='cd ~/Dropbox/git'
171
    alias goipynb='cd ~/Dropbox/work/ipynb-notes'
172
    alias gotex='cd ~/Dropbox/research_dropbox/latex'
173
174
    alias gowork='cd ~/Dropbox/work/sbia_work/'
175
     # 3 sphinx notebooks I use quite often
    alias goconf='cd ~/Dropbox/git/configs'
    alias gonotes='cd ~/Dropbox/git/coding_notes'
178
```

```
alias gosnippets='cd ~/Dropbox/git/snippet'
179
180
     # location of the python modules from anacaonda
181
     alias gopymodules='cd ~/anaconda2/lib/python2.7/site-packages'
182
     alias golocalpymod='cd ~/.local/lib/python2.7/site-packages'
183
184
    #-----#
185
    # handling clipboards....
186
    #-----#
187
      _bookmark_clipboards____() { echo ""; }
189
     # http://stackoverflow.com/questions/5130968/how-can-i-copy-the-output-of-a-command-directly-into-numbers.
190
     alias c="xclip -selection clipboard"
191
     alias v="xclip -o -selection clipboard"
192
193
194
     # Neat function I grabbed from:
195
     # http://madebynathan.com/2011/10/04/a-nicer-way-to-use-xclip/
196
197
     cb() {
198
       local _scs_col="\e[0;32m"; local _wrn_col='\e[1;31m'; local _trn_col='\e[0;33m'
199
       # Check that xclip is installed.
200
       if ! type xclip > /dev/null 2>&1; then
201
        echo -e "$_wrn_col""You must have the 'xclip' program installed.\e[0m"
202
       # Check user is not root (root doesn't have access to user xorg server)
203
       elif [[ "$USER" == "root" ]]; then
204
         echo -e "$_wrn_col""Must be regular user (not root) to copy a file to the clipboatd.\e[0m"
205
       else
206
         # If no tty, data should be available on stdin
207
         if ! [[ "$( tty )" == /dev/* ]]; then
           input="$(< /dev/stdin)"
209
         # Else, fetch input from params
210
         else
211
           input="$*"
212
         fi
213
         if [ -z "$input" ]; then # If no input, print usage message.
           echo "Copies a string to the clipboard."
           echo "Usage: cb <string>"
                      echo <string> | cb"
           echo "
217
         else
218
           # Copy input to clipboard
219
           echo -n "$input" | xclip -selection c
220
           # Truncate text for status
221
222
           if [ f input} -gt 80 ]; then input="f (echo f input | cut -c1-80)f trn_col...\e[f input
223
           # Print status.
           echo -e "$_scs_col""Copied to clipboard:\e[0m $input"
224
         fi
225
       fi
226
227
228
229
     # Aliases / functions leveraging the cb() function
230
231
     function cbf() { cat "$1" | cb; }
                                                # Copy contents of a file
232
     alias cbssh="cbf ~/.ssh/id_rsa.pub"
                                                # Copy SSH public key
233
     alias cbwd="pwd | cb"
                                                 # Copy current working directory
234
     alias cbhs="cat $HISTFILE | tail -n 1 | cb" # Copy most recent command in bash history
236
```

```
#-----#
237
   # Dealing with **colors**
238
   239
      _bookmark_colors____() { echo "" ; }
240
241
242
     # git related
243
     #-----#
244
     #http://stackoverflow.com/questions/7066325/list-qit-aliases
245
    alias git_alias='git config --get-regexp alias | pygmentize -l sh'
246
     # | added 08-24-2016 (16:11)
248
     # remove color from stdou (wow, harder than i expected)
249
     #http://stackoverflow.com/questions/17998978/removing-colors-from-output
250
     #http://unix.stackexchange.com/questions/111899/how-to-strip-color-codes-out-of-stdout-and-pipe-to
251
    alias stripcolors='sed "s/\x1B\[\([0-9]\{1,2\}\(;[0-9]\\{1,2\}\)\\?\)\\?[mGK]//g"'
252
253
     #-----#
254
     # to get colored output from ``less`` on scripts
255
     # http://superuser.com/questions/117841/get-colors-in-less-command
256
257
258
    mvless(){
      pygmentize $1 | less
259
260
261
    pyg_sh(){
262
      # pygmentize shell code
263
      pygmentize -1 sh $1
264
265
266
267
    pyg_py(){
      # pygmentize python code
268
      pygmentize -l python $1
269
270
271
   #-----#
272
   # Git related functions
   #-----#
     __bookmark_git____() { echo "" ; }
275
    git_anonymize(){
276
      git config user.name "noname"
277
      git config user.email noname@example.com
278
279
280
    alias twsphinx_check='google-chrome build/html/index.html' # 08-17-2016 (13:33)
    alias twalias='alias | pygmentize -1 sh' # 08-17-2016 (13:37)
281
282
    git_clear_author_history() {
283
      git filter-branch -f --env-filter '
284
285
      CORRECT_NAME="your name"
      CORRECT_EMAIL="your_email@example.com"
288
      export GIT COMMITTER NAME="$CORRECT NAME"
289
      export GIT_COMMITTER_EMAIL="$CORRECT_EMAIL"
290
291
292
      export GIT_AUTHOR_NAME="$CORRECT_NAME"
      export GIT_AUTHOR_EMAIL="$CORRECT_EMAIL"
      ' --tag-name-filter cat -- --branches --tags
294
```

```
295
296
     git_author_history_tak(){
297
       git filter-branch -f --env-filter '
298
299
       CORRECT_NAME="Takanori Watanabe (sbia-pc125)"
300
       CORRECT_EMAIL="Takanori.Watanabe@uphs.upenn.edu"
301
302
       export GIT_COMMITTER_NAME="$CORRECT_NAME"
303
       export GIT_COMMITTER_EMAIL="$CORRECT_EMAIL"
304
305
      export GIT_AUTHOR_NAME="$CORRECT_NAME"
306
       export GIT_AUTHOR_EMAIL="$CORRECT_EMAIL"
307
       ' --tag-name-filter cat -- --branches --tags
308
309
310
   #-----#
311
312
   # Sublime and Sphinx related
   #----
                                     _____#
313
      _bookmark_subl_sphinx____() { echo "" ; }
314
315
     #alias open_sphinx_html='firefox _build/html/index.html'
316
317
     subl_() { # open both snippets and configs
318
      subl -n
319
       subl -a ~/Dropbox/git/configs/
320
       subl -a ~/Dropbox/git/snippet/
321
       subl -a ~/Dropbox/git/coding_notes/
322
323
324
325
     # modify snippets via sublime text
     alias subl_snip='subl -n -a ~/Dropbox/git/snippet'
326
327
     # to publish in github
328
     alias nojekyll='touch .nojekyll'
329
330
   #-----#
   # SNIPPETS to print out (as a self reminder)
332
   #-----#
333
   # just a bunch of reminder snippets i can print out in the shell
334
      _bookmark_snip___() { echo 'no functionality. just a bookmark for sublime (use ctrl+r to navigate
335
     _snip_find(){
336
      echo '
337
338
       find $DIR # recursively print out file directories
       find $PWD | grep helper.md
339
       find $PWD | grep helper.html | xclip
340
       find $PWD -maxdpeth 1
341
       find . -iname "*chrome*" # case insensitive
342
       find . -name "*chrome*" # case sensitive
343
       find . -iname "*chrome*" # print filenames, followed by a NULL character instead of the "newline
344
345
       # ignore any file containing "est" (even in the directory name) and print out rest
346
       # (note: -o is the OR operator...see "operator" list below)
347
       find . -wholename '*est*' -prune -o -print
348
349
       # stuffs with -type option
350
       find . d # list directories
352
       find . f # list regular files
```

```
find . l # list symlinks
353
354
       #-----
355
       # name vs. whilename
356
       # - suppose i have file /Data_Science/test.txt
357
       #----
358
       find . -iwholename "*Sci*.txt"
359
          # this will find the above file
360
       find . -iname "*Sci*.txt"
361
          # this will NOT find the above file
362
       List filenames ending in .mp3, searching in the music folder and subfolders:
363
       $ find ./music -name "*.mp3"
365
       Find .doc files that also start with 'questionnaire' (AND)
366
       $ find . -name '*.doc' -name questionnaire*
367
368
       Find .doc files that do NOT start with 'Accounts' (NOT)
369
       $ find . -name '*.doc' ! -name Accounts*
370
       ' | pygmentize -l sh
371
372
373
374
     _snip_for(){
       echo '
375
       for run in {1..10}
376
377
        command
378
       done
379
380
       # single line
381
       for run in {1..30}; do ipython t_0809c_enet_tobpnc_age.py; done
382
       ' | pygmentize -l sh
383
384
385
     _snip_rename(){
386
         echo '
387
         #http://unix.stackexchange.com/questions/146743/processing-multiple-extensions
388
         #https://www.gnu.org/software/bash/manual/html_node/Brace-Expansion.html
390
         # rename the filename part "Array" with "_PCA" for all files ending with extension .mat
391
         rename Array _PCA *.mat
392
393
         # rename png "prefix" with "normalized" in files with .png extensions
394
         rename '"'"s/prefix/normalized/'"'" *.png
396
         # rename files with either .png or .pkl extension (see link on brack expansion above)
397
         # (-n will do a dry run, letting me check the rename will do what i want it to do )
398
         rename -n '"'"s/normalized/test/'"" *.{png,pkl}
399
400
         # use -n to check rename will do what i want it to do
401
         rename -n '"'"'s/graphnet/elasticnet/;'"'" *.m # check
         rename -v '"'"s/graphnet/elasticnet/;'""" *.m # run verbosely after checking
404
         #----#
405
         # add suffix/prefix to files
406
         # see 2nd answer in http://stackoverflow.com/questions/208181/how-to-rename-with-prefix-suffix
407
         #-----#
         # rename files with extensions (to avoid directory...not robust, but does what i want most of
         for filename in *\.*; do echo $filename; done;
410
```

```
for filename in *; do echo $filename; done; # <- this includes directory, which me not like
411
412
         for filename in *\.*; do mv "${filename}" "prefix_${filename}"; done;
413
         ' | pygmentize -l sh
414
415
416
     _snip_scp(){
417
        echo
418
         #_____#
         # relevant options
420
         #------
421
         #| -r : recursive
422
         #| -v : verbose (i probably won'"''t need)
423
         \#| -q : quiet
424
425
         #------
         # demos
427
428
         # Copy dummy.txt to home directory in remote host:
429
         touch ~/dummy.txt
430
         scp ~/dummy.txt watanabt@cbica-cluster.uphs.upenn.edu:~/
431
432
         # copy dummy.txt on server as dummy_cp.txt to local home folder
433
         scp watanabt@cbica-cluster.uphs.upenn.edu:~/dummy.txt ~/dummy_cp.txt
434
         ' | pygmentize -l sh
435
436
437
     _snip_mogrify(){
438
         echo '
439
         mogrify -resize 50% *.png
         mogrify -resize 500! *.png
                                       => changes only x-axis
         mogrify -resize 500 *.png
                                       => changes (x,y) axis in proportion
442
         mogrify -trim *.png
443
444
         #| http://arcoleo.org/dsawiki/Wiki.jsp?page=Recursively%20run%20Mogrify%20on%20a%20Directory
445
         #| Mogrify is an image tool that comes with ImageMagick. It is useful for resizin\mathfrak{q}, compressing
         $ find ./ -name "*.png" -exec mogrify -some_option {} \;
         $ find ./ -name "*.png" -exec mogrify -resize 40% {} \;
448
         ' | pygmentize -l sh
449
450
451
     _snip_pipedream(){
452
         echo '
453
454
         #http://unix.stackexchange.com/questions/41740/find-exec-vs-find-xargs-which-one-to-choose
455
             the -exec "{}" \; approach seems to be specific to find (i prefer unity with *args)
456
457
         #http://stackoverflow.com/questions/4509624/how-to-limit-depth-for-recursive-file-list
458
         # http://ss64.com/bash/find.html
         find . -maxdepth 1 -type d -exec ls -ld "{}" ";"
         find . -maxdepth 1 -type d -exec ls -ld \{\} \; # same as above
461
         find . -maxdepth 1 -type d | xargs ls -ld # same as above (i find this the most intuitive)
462
         1s -ld $(find . -maxdepth 1 -type d) # same as above
463
464
         # this doesnt give the same result as "xargs" approach...figure out why later
         find . -maxdepth 1 -type d | ls -ld
         ' | pygmentize -l sh
468
```

```
469
470
      _snip_grep_recursively(){
471
          echo '
472
          grep -r "texthere" .
473
          # You can also mention files to exclude with --exclude.
474
          grep -r --include "*.txt" texthere .
475
476
          # use brace expansion to allow multiple extension
477
          grep -r --include=*.{py,m} test .
479
           ' | pygmentize -l sh
480
481
      _snip_demo_sed(){
482
          echo '
483
484
          # replace white-string with newline
          bash 0622_2016_rename_tobvols.sh | sed '"'"s/ /\n/q'"""
486
          echo $PYTHONPATH
487
          /home/takanori/Dropbox/work/external-pymodules:/home/takanori/Dropbox/work/sbia_work/python/modules
488
489
          # recall, g for global replacement
490
          echo $PYTHONPATH | sed '"'"s/:/\n/q'"'"
          /home/takanori/Dropbox/work/external-pymodules
492
          /home/takanori/Dropbox/work/sbia_work/python/modules
493
          /home/takanori/work-local/external-python-modules/deepnet
494
          /home/takanori/mybin/spark-2.0.0-bin-hadoop2.7/python/pyspark
495
          ' | pygmentize -l sh
496
497
      _snip_demo_awk(){
499
          echo '
500
          ls -l | awk '"'" {printf $5 "\t" $9"\n"}'""
501
502
              http://stackoverflow.com/questions/2021982/awk-without-printing-newline
503
              http://askubuntu.com/questions/231995/how-to-separate-fields-with-space-or-tab-in-awk
              http://www.catonmat.net/blog/awk-one-liners-explained-part-one/
505
              http://www.staff.science.uu.nl/~oostr102/docs/nawk/nawk_41.html
506
          ' | pygmentize -1 sh
507
508
509
      _snip_computer_info() {
510
          echo '
511
          # get cpu information
512
          cat /proc/cpuinfo
513
514
          #-- see gnome version ---
515
          gnome-shell --version
516
          lsb_release -a
518
          # to figure out which linux distribution you are using
519
          # (ref: http://www.cyberciti.biz/faq/find-linux-distribution-name-version-number/
520
          cat /etc/*-release
521
522
          locate libfortran.so
523
          ' | pygmentize -l sh
524
525
526
```

```
_snip_demo_timestamp(){
527
          echo '
528
          echo $(date +"%Y-%m-%d_%H:%M:%S")
529
          ' | pygmentize -l sh
530
531
532
      _snip_ls_symlink_only(){
533
          echo
534
          # aliased as ls_sym
535
          ls -l $(find ./ -maxdepth 1 -type 1 -print)
536
          ' | pygmentize -l sh
537
538
539
      _snip_github_clone_branch(){
540
          echo '
541
          #http://stackoverflow.com/questions/1911109/clone-a-specific-git-branch
542
          # skeleton
543
          git clone -b my-branch git@github.com:user/myproject.git local_folder_name
544
545
          # actual run
546
          qit clone -b minimalist https://github.com/wtak23/sphinx_skeleton.git jinja2
547
          ' | pygmentize -l sh
548
549
550
      _snip_moving_and_copying(){
551
552
        # rename a directory (note '/' after directory name has NO impact here, there are cases I shoul
553
        mv /home/user/oldname /home/user/newname
554
555
        #=== cp helper ===#
556
        # copy files *inside* the folder "test/" inside folder "target"
557
        qosnippets; cd tests; mkdir source target; cd source; touch a b c; cd ...
558
559
        # copy files *inside* the folder "test/" inside folder "target" (note: -R and -r are the same he
560
        cp -r source/* target
561
562
        # copy entire folder *source* into *target* (without ``-r``, the subdirectories wont get copied)
        cp -r source* target
565
        #--- cleanup test files from above---#
566
        cd ..; rm -r tests/*
567
568
570
        #--- remove entire directory including files inside recursively ---#
571
        rm -rf test/
        ' | pygmentize -l sh
572
573
574
575
      _snip_ps() {
          echo '
          # a <- includes ``root`` in userprocess</pre>
577
          # u <- include ``username`` column
578
          \# x <- list all processes owned by me
579
          ps aux
580
           ' | pygmentize -l sh
581
582
      _snip_git_localname(){
584
```

```
echo '
585
         # change user name in local repository
586
         # https://git-scm.com/book/en/v2/Customizing-Git-Git-Configuration
587
         git config user.name "noname"
588
         git config user.email noname@example.com
589
         ' | pygmentize -l sh
590
591
592
     _snip_stdout_stderr(){
593
         echo '
594
         # Output stdout and stderr to terminal and logfile
596
597
         # http://stackoverflow.com/questions/418896/how-to-redirect-output-to-a-file-and-stdout
598
         # http://stackoverflow.com/questions/18460186/writing-outputs-to-log-file-and-console
599
         # save stdout and stderr to a file
601
         bash mymake.sh >> log.txt 2>&1
602
603
         # save logfile like above, but also print on terminal screen
604
         bash mymake.sh 2>&1 | tee log.txt
605
         ' | pygmentize -l sh
606
607
608
     _snip_logout(){  # just a wrapper to _snip_stdout_stderr (this one may have better mneumonic)
609
         _snip_stdout_stderr
610
611
612
     _snip_python_simple_http_server() {
613
         echo '
614
         # for status messages, see: http://www.w3schools.com/tags/ref_httpmessages.asp
615
         python -m SimpleHTTPServer 8000 &
616
         firefox "http://localhost:8000/"
617
         ' | pygmentize -l sh
618
619
    # Everything below here are unsorted. Categorized later.
   # Last organized: 02 September 2016 (Friday)
623
   #**************
624
       _bookmark_unsorted____() { echo "I'm unsorted" ; }
625
```

2.1.3 gitconfig content

Todo

clean this unholy mess...

```
.. literalinclude:: ./sbia-pc-125/.gitconfig
    :language: bash
    :linenos:
```

```
#| http://stackoverflow.com/questions/2183900/how-do-i-prevent-git-diff-from-using-a-pager
  #| last update: 2/26/2013
2
  [user]
3
         name = Takanori Watanabe (sbia-pc125)
4
         email = Takanori.Watanabe@uphs.upenn.edu
  [core]
6
         #editor = "emacs -nw"
         editor = subl -n -w # http://stackoverflow.com/questions/22631863/setting-up-sublimetext-3-a.
         pager = cat
         symlinks = false
10
         autocrlf = false # see Progit pdf-pg.152
11
         filemode = false # to suppress unix file permission change in windows
12
  [color]
13
      branch = true
14
      diff = true
15
      status = true
16
      pager = true
17
  [alias]
18
         19
         # Things i added post july2015
20
         21
22
         # http://stackoverflow.com/questions/3801321/git-list-only-untracked-files-also+custom-comma.
         lsi = "!git ls-files -o --exclude-standard $1"
23
         # aaaaa = !git add $(git 1s-files -o --exclude-standard)
24
25
         26
         # Useful references
27
         # - https://git.wiki.kernel.org/index.php/Aliases
28
         #-----#
29
         sortdiff = !sh -c 'git diff "$@" | grep "^[+-]" | sort --key=1.2 | uniq -u -s1'
30
         unstage = "!git reset HEAD $"
31
32
         pu = push -u
33
         s = status
34
35
         36
         # 1s-files are handy for showing only: (08/20/2014)
37
                 -d: deleted files
38
                -m: modified files
39
                -o: untracked files
40
41
         # - use less as default, lsc to output on terminal (c for cat)
42
43
         ls = "!git ls-files $1 | less -rN"
44
         lsc = "!git ls-files $1"
45
         46
47
         sl = "!git status | less -rN"
         ######## add ########
         ai = add -i
50
         aa = add -A
51
         \# au = add -u
52
53
         #| add all and comment (use with care)
54
         aac = "!git add -A && git commit -m"
55
56
         #| add, then display status
57
         a = "!git add $1 && git status"
58
```

```
59
            ######### branches ########
60
            b = branch
            ba = branch - a
            bav = branch - av
63
            #| show commit history of branches (http://www.kernel.org/pub//software/scm/git/docs/git-sho
65
            sb = "!git show-branch --color=always | less -rN"
66
67
            #| same as above, but for remote branches
68
            sbr = "!git show-branch -r --color=always | less -rN"
69
70
            #| same as above, but for all branches
71
            sbr = "!git show-branch -a --color=always | less -rN"
72
73
            \# | display only the names of the files that went through changes between two brrac{1}{4}nches (remot
            #| Example: $ git dfname branch1 branch2
                                 => this will show the file changed FROM branch1 to branch2
            # /
76
            # /
                                  => (eq: D file1.txt --- file1 that was in branch1 is deleted in branch2
77
            dfname = "!qit diff --name-status $1..$2"
78
            # A: addition of a file
79
            # C: copy of a file into a new one
80
            # D: deletion of a file
81
            # M: modification of the contents or mode of a file
82
83
            # R: renaming of a file
            # T: change in the type of the file
84
            # U: file is unmerged (you must complete the merge before it can be committed)
85
            # X: "unknown" change type (most probably a bug, please report it)
86
            ######### commits #########
                                                   (9/23/2013 - added --reset-author so that amended commi
88
            c = commit
89
            ca = commit --amend --reset-author
90
            can = commit --amend --no-edit --reset-author # (09/19/2013) http://stackoverflow.com/questic
91
            call = "!git add -A && git commit --amend --no-edit --reset-author" # (09/22/2013) add all a.
92
            # cm = "!git commit -m $1" #| don't know how to allow argument with quotations...ask Dan in
93
            cm = commit - m
            cam = commit --amend -m
95
            r = remote
97
            rv = remote -v
98
            ######## diffs #########
            d = diff --color=always
            dc = diff --cached --color=always
102
103
            #| suffix "l" for "less"
104
            dl = "!git diff --color=always | less -rN"
105
            dcl = "!git diff --cached --color=always | less -rN"
            ######## logs ####### (see progit-pdf-pg25)
108
            #| suffix "n" for "number"
109
            ln = "!git log $1 --graph --pretty=format:'%Cred%h%Creset -%C(yellow)%d%Creset $5 %Cgreen(%c)
110
            ll = "!git log --graph --pretty=format:'%Cred%h%Creset -%C(yellow)%d%Creset %s %Cgreen(%cr) %
111
            1 = "!git log -5 --graph --pretty=format:'%Cred%h%Creset -%C(yellow)%d%Creset %$ %Cgreen(%cr
112
113
            ######## other useful commands #########
            #| checkout a file from a different branch, and give it a new file name
115
            #| (\$1 = branch-names, \$2 = filename \$3 = output filename)
116
```

```
#| Example: $ git cho takanori-pc/develop tinit.m tinit_tmp.m
117
            #| ERROR: output ends messed up...
119
            #| Apparently it's not recognizing colon character ":" ...
120
            #/ manually do this...easy enough =)
121
            #/ Example:
122
            #/ $ git show takanori-pc/master:tinit.m > tinit_pc.m
            #cho = "!git show $1:$2 > $3"
            #sfile = "!git show $1:$2 --color=always" #| manually do pipe to output
125
126
            #/ display the latest commits fo all branches (with their commit time)
127
            ball = "!bash git_bra.sh"
128
129
            fall = fetch --all
130
   [push]
131
            default = matching
132
```

2.2 Cygwin setup (bash-cygwin.rst)

bash_cygwin.rst

Contents

- symlink setup
- bashrc content
- bash_aliases content
- apt-cyg
- Things I install on most of my computers
- git related stuffs
 - github sshkey
 - git code completion
- Random overflows
 - to get git gui working...
 - xming setup
 - disable annoying bell sound in cygwin

2.2.1 symlink setup

Note: Syntax for creating symlinks in Windows (run as admin):

```
mklink SOURCE_FILE TARGET_FILE # for individual files
mklink /d SOURCE_DIR TARGET_DIR # for entire directory
```

CRITICAL CHANGE (2016-09-04)

Changed \$HOME in cygwin to my actual windows home directory in .bashrc. Target of the symlink below have now changed.

Updated version

```
mklink "c:Users\takanori\.gitignore" "C:\Users\takanori\Dropbox\git\configs\source\bash_config\cygwin mklink "c:Users\takanori\.bash_aliases" "C:\Users\takanori\Dropbox\git\configs\source\bash_config\cygwin mklink "c:Users\takanori\.bashrc" "C:\Users\takanori\Dropbox\git\configs\source\bash_config\cygwin\.Implies mklink "c:Users\takanori\.bashrc" "C:\Users\takanori\Dropbox\git\configs\source\bash_config\cygwin\.Implies mklink "c:Users\takanori\.inputrc" "C:\Users\takanori\Dropbox\git\configs\source\bash_config\cygwin\.mklink "c:Users\takanori\.emacs" "C:\Users\takanori\Dropbox\git\configs\source\bash_config\cygwin\.emacs" "C:\Users\takanori\Dropbox\gi
```

(**old version**) Below ran on ASUS on 09-01-2016 (17:57)

```
mklink "c:\cygwin64\home\takanori\.gitignore" "C:\Users\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\.gitconfig" "C:\Users\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\.bash_aliases" "C:\Users\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\.bashrc" "C:\Users\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\.emacs" "C:\Users\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takanori\Dropbox\git\configs\source\bash_configklink"c:\cygwin64\home\takano
```

2.2.2 bashrc content

```
.. literalinclude:: ./cygwin/.bashrc
    :language: bash
    :linenos:
```

```
# |---- Problem with bash complaining "\r command not found" ---- | #
   #|http://stackoverflow.com/questions/11616835/cgywin-r-command-not-found-bashrc-bash-profile
   (set -o igncr) 2>/dev/null && set -o igncr; # this comment is needed
   # To the extent possible under law, the author(s) have dedicated all
   # copyright and related and neighboring rights to this software to the
   # public domain worldwide. This software is distributed without any warranty.
   # You should have received a copy of the CCO Public Domain Dedication along
   # with this software.
   # If not, see <a href="http://creativecommons.org/publicdomain/zero/1.0/">http://creativecommons.org/publicdomain/zero/1.0/>.
   # base-files version 4.1-1
11
12
   # ~/.bashrc: executed by bash(1) for interactive shells.
13
14
   # The latest version as installed by the Cygwin Setup program can
15
   # always be found at /etc/defaults/etc/skel/.bashrc
16
17
   # Modifying /etc/skel/.bashrc directly will prevent
18
   # setup from updating it.
19
20
   # The copy in your home directory (~/.bashrc) is yours, please
21
   # feel free to customise it to create a shell
22
   # environment to your liking. If you feel a change
   # would be benifitial to all, please feel free to send
   # a patch to the cygwin mailing list.
25
26
   # User dependent .bashrc file
27
28
   # If not running interactively, don't do anything
29
   [[ "$-" != *i* ]] && return
31
   # Shell Options
32
33
```

```
# See man bash for more options...
35
   # Don't wait for job termination notification
36
   # set -o notify
37
38
   # Don't use ^D to exit
39
   # set -o ignoreeof
40
41
   # Use case-insensitive filename globbing
42
   # shopt -s nocaseglob
43
   # Make bash append rather than overwrite the history on disk
45
   # shopt -s histappend
46
47
   # When changing directory small typos can be ignored by bash
48
   # for example, cd /vr/lgo/apaache would find /var/log/apache
49
   # shopt -s cdspell
51
   # Completion options
52
53
   # These completion tuning parameters change the default behavior of bash_completion:
54
55
   # Define to access remotely checked-out files over passwordless ssh for CVS
56
   # COMP_CVS_REMOTE=1
   # Define to avoid stripping description in --option=description of './configure --help'
59
   # COMP_CONFIGURE_HINTS=1
60
61
   # Define to avoid flattening internal contents of tar files
62
   # COMP_TAR_INTERNAL_PATHS=1
63
   # Uncomment to turn on programmable completion enhancements.
65
   # Any completions you add in ~/.bash_completion are sourced last.
66
   # [[ -f /etc/bash_completion ]] && . /etc/bash_completion
67
68
   # History Options
69
   # Don't put duplicate lines in the history.
   # export HISTCONTROL=$HISTCONTROL${HISTCONTROL+,}ignoredups
72
73
   # Ignore some controlling instructions
74
   # HISTIGNORE is a colon-delimited list of patterns which should be excluded.
75
   # The '&' is a special pattern which suppresses duplicate entries.
   # export HISTIGNORE=$'[ \t]*:&:[fb]g:exit'
77
78
   # export HISTIGNORE=$'[ \t]*:&:[fb]q:exit:ls' # Ignore the ls command as well
79
   # Whenever displaying the prompt, write the previous line to disk
80
   # export PROMPT COMMAND="history -a"
81
82
   # Aliases
83
   # Some people use a different file for aliases
85
   if [ -f "${HOME}/.bash_aliases" ]; then
86
    source "${HOME}/.bash_aliases"
87
   fi
88
89
   # Some example alias instructions
   # If these are enabled they will be used instead of any instructions
```

```
# they may mask. For example, alias rm='rm -i' will mask the rm
    # application. To override the alias instruction use a \ before, ie
93
   # \rm will call the real rm not the alias.
94
    # Interactive operation...
   # alias rm='rm -i'
97
   # alias cp='cp -i'
   # alias mv='mv -i'
   # Default to human readable figures
   # alias df='df -h'
   # alias du='du -h'
104
   # Misc :)
105
   # alias less='less -r'
                                                     # raw control characters
106
   # alias whence='type -a'
                                                      # where, of a sort
   # alias grep='grep --color=always'
                                                            # show differences in colour
   # alias egrep='egrep --color=auto'
                                                     # show differences in colour
   # alias fgrep='fgrep --color=auto'
                                                     # show differences in colour
110
111
   # # Some shortcuts for different directory listings
112
   # alias ls='ls -hF --color=tty'
                                                      # classify files in colour
113
   # alias dir='ls --color=auto --format=vertical'
   # alias vdir='ls --color=auto --format=long'
   # alias 11='1s -1'
                                                      # long list
   # alias la='ls -A'
                                                      # all but . and ..
117
   # alias l='ls -CF'
118
119
   # Umask
120
121
   # /etc/profile sets 022, removing write perms to group + others.
   # Set a more restrictive umask: i.e. no exec perms for others:
123
   # umask 027
124
   # Paranoid: neither group nor others have any perms:
   # umask 077
   # Functions
   # Some people use a different file for functions
130
   # if [ -f "${HOME}/.bash functions" ]; then
131
   # source "${HOME}/.bash_functions"
132
   # fi
133
134
135
    # Some example functions:
136
   # a) function settitle
137
   # settitle ()
138
139
   # echo -ne "\e]2;$@\a\e]1;$@\a";
140
141
143
   # b) function cd_func
   # This function defines a 'cd' replacement function capable of keeping,
   # displaying and accessing history of visited directories, up to 10 entries.
   # To use it, uncomment it, source this file and try 'cd --'.
   # acd_func 1.0.5, 10-nov-2004
   # Petar Marinov, http://geocities.com/h2428, this is public domain
   # cd_func ()
```

```
150
        local x2 the_new_dir adir index
151
        local -i cnt
152
153
        if [[ $1 == "--" ]]; then
154
155
         return 0
156
       fi
157
158
        the_new_dir=$1
159
        [[ -z $1 ]] && the_new_dir=$HOME
161
        if [[ ${the_new_dir:0:1} == '-' ]]; then
162
163
         # Extract dir N from dirs
164
         index=${the_new_dir:1}
165
         [[ -z $index ]] && index=1
166
167
         adir=$(dirs +$index)
         [[ -z $adir ]] && return 1
168
         the_new_dir=$adir
169
        fi
170
171
172
        # '~' has to be substituted by ${HOME}
173
        [[ ${the_new_dir:0:1} == '~' ]] && the_new_dir="${HOME}}${the_new_dir:1}"
174
175
176
        \# Now change to the new dir and add to the top of the stack
177
       pushd "${the_new_dir}" > /dev/null
178
179
        [[ $? -ne 0 ]] && return 1
180
        the_new_dir=$(pwd)
181
182
        # Trim down everything beyond 11th entry
183
       popd -n +11 2>/dev/null 1>/dev/null
184
185
        # Remove any other occurence of this dir, skipping the top of the stack
        for ((cnt=1; cnt <= 10; cnt++)); do
188
         x2=$(dirs +${cnt}) 2>/dev/null)
189
         [[ $? -ne 0 ]] && return 0
190
         [[ $\{x2:0:1\} == '~' ]] \&\& x2="$\{HOME\}$\{x2:1\}"
191
         if [[ "${x2}" == "${the_new_dir}" ]]; then
192
193
            popd -n +$cnt 2>/dev/null 1>/dev/null
194
            cnt=cnt-1
195
        done
196
197
198
        return 0
199
   # alias cd=cd_func
201
202
203
204
   # From here, tak's custom commands (08/13/2014 2:35:AM)
   # http://superuser.com/questions/109537/unix-ls-how-to-sort-first-directories-then-file$-etc
```

```
alias ls='ls --color -h --group-directories-first'
```

2.2.3 bash_aliases content

```
.. literalinclude:: ./cygwin/.bash_aliases
    :language: bash
    :linenos:
```

```
# | ---- Problem with bash complaining "\r command not found" ---- | #
   #|http://stackoverflow.com/questions/11616835/cgywin-r-command-not-found-bashrc-bash-profile
   (set -o igncr) 2>/dev/null && set -o igncr; # this comment is needed
   #| The bash startup files: http://www.linuxfromscratch.org/blfs/view/6.3/postlfs/profile.html
   # cygwin/windows specific setup
   # (part that's difference from my bashrc file on my linux comptuers)
9
10
      _bookmark_windows_specific_configs____() { echo "windows specific" ; }
11
12
13
       # How to use gitk in cygwin
       # http://stackoverflow.com/questions/9393462/cannot-launch-git-gui-using-cygwin-on-windows
15
      export DISPLAY=:0.0
16
       # export DISPLAY=Cygwin:0.0
17
18
       # to enable git auto complete (pdf-pg37 progit, 3.7.1)
19
      source /etc/bash_completion.d/git
20
      alias bsource="source ${HOME}/.bashrc"
21
22
23
       # change HOME to windows home (not cygwin)
24
       #_____
25
      export HOME="/cygdrive/c/Users/takanori"
      export HOME_WIN="/cygdrive/c/Users/takanori"
      export HOME_CYG="/home/takanori"
28
29
       #------
30
       # convert windows directory to cygwin type
31
32
33
       # http://stackoverflow.com/questions/19999562/bash-script-to-convert-windows-path-to-linux-path #
34
       # http://stackoverflow.com/questions/11814374/shell-reading-backslash-in-command-lihe-parameters
35
36
       # cdwin(){
37
         set $(history | tail -1 )
38
           shift 2
           path="$*"
            cd $(cygpath "$path") #<- never knew about ``cygpath`` command</pre>
41
42
43
       #| deprecated...I'd have to include quotes to the argument everytime using below, which is tedion
44
45
       # cdwin(){
           echo "I receive the variable --> $1"
            line=$(sed -e 's#^J:##' -e 's#\\#/#g' <<< "$1")
```

```
echo "$line"
48
        # }
49
50
51
        # foxit reader
52
        # - can't invoke by relative path (eg: ``$foxit ./dir/file.pdf`` won't work)
53
        # - hence call by full absolute path
54
55
        # (10/10/2014)
        # - found out about ``cygpath``, very useful!
57
58
        #| Need a function that converts cygdrive-bash directories into windows directory form...good ex-
59
        foxit(){ # example usage: $foxit hw1/sol1.pdf
60
            if [ -z $1 ]; then
61
                echo "Hey Tak, give an argument!"
62
            else
64
                # first convert input to full path in windows filesystem form
65
66
                set $(history | tail -1)
67
                shift 2
68
                path="$*"
69
                foxitEx="/cygdrive/C/Program Files (x86)/Foxit Software/Foxit Reader/Foxit Reader.exe"
71
                # echo $(cygpath -w "$PWD$1")
72
                # echo $foxitEx $(cygpath -w "$PWD\\$1")
73
                "$foxitEx" $(cygpath -w "$PWD\\$1") &
74
75
                # echo $(cygpath "$path")
76
                # "/cygdrive/C/Program Files (x86)/Foxit Software/Foxit Reader/Foxit Reader.exe" $1 & <-
77
78
                # echo "/cygdrive/C/Program Files (x86)/Foxit Software/Foxit Reader/Foxit Reader.exe $PW.
79
                # echo "/cygdrive/C/Program Files (x86)/Foxit Software/Foxit Reader/Foxit Reader.exe" "$.
80
                # "/cygdrive/C/Program Files (x86)/Foxit Software/Foxit Reader/Foxit Reader exe" $pwd$1
81
            fi
82
       }
83
84
        #| when i want to pass full-file-path in windows directory system
85
       winfoxit(){ # example usage: $winfoxit C:\Users\takanori\Dropbox\research_dropbox\latex\eecs545_
86
            if [-z $1]; then
87
                echo "Hey Tak, give an argument!"
88
            else
89
                set $(history | tail -1 )
91
                shift 2
92
                foxitEx="/cygdrive/C/Program Files (x86)/Foxit Software/Foxit Reader/Foxit Reader.exe"
93
94
                # echo $(cygpath -w "$PWD$1")
95
                echo $foxitEx $(cygpath -w "$1")
                "$foxitEx" $(cygpath -w "$1") &
            fi
98
       }
99
100
       winSumatra(){  # example usage: $winsumatra C:\Users\takanori\Dropbox\research_dropb\psix\latex\eecs
101
            set $(history | tail -1)
102
            shift 2
            path="$*"
104
            # echo "/cygdrive/C/Program Files (x86)/SumatraPDF/SumatraPDF.exe" $(cygpath -w | "$1")
105
```

```
"/cygdrive/C/Program Files (x86)/SumatraPDF/SumatraPDF.exe" $(cygpath -w "$1")
106
107
108
      winsublime() {
109
          set $(history | tail -1)
110
          shift 2
111
          path="$*"
112
          # echo "/cygdrive/C/Program Files/Sublime Text 3/sublime_text.exe" $(cygpath -w | "$1")
113
          "/cygdrive/C/Program Files/Sublime Text 3/sublime_text.exe" $(cygpath -w "$1") &
115
116
   #-----#
117
   # wrapper aliases to invoke programs from cygwin 09-02-2016 (15:21)
118
   #-----#
119
      _bookmark_winprogram____() { echo "" ; }
120
    alias sumatra='"/cygdrive/C/Program Files (x86)/SumatraPDF/SumatraPDF.exe"'
121
    alias chrome=""/cygdrive/C/Program Files (x86)/Google/Chrome/Application/chrome.exe"
122
    alias google-chrome='"/cygdrive/C/Program Files (x86)/Google/Chrome/Application/chrome.exe"'
123
    alias subl='"/cygdrive/C/Program Files/Sublime Text 3/sublime_text.exe"'
124
125
   126
   # Set env-vars
127
   #-----
                     _____#
128
   # http://serverfault.com/questions/606/what-is-the-best-way-to-set-an-environmet-variable-in-bashrc
129
   #-----#
130
     _bookmark_ENVVARS____() { echo "I'm just a bookmark"; }
131
   #export PATH=$PATH:"C:\Program Files\Amazon\AWSCLI"
132
     # http://docs.aws.amazon.com/cli/latest/userguide/installing.html#install-msi-on-wind¢ws
133
    export PATH=$PATH:"/cygdrive/c/Program Files/Amazon/AWSCLI"
134
    export DIR_GIT="/cygdrive/c/Users/takanori/Dropbox/git"
135
    export DIR_DB='/cygdrive/c/Users/takanori/Dropbox'
136
137
     #/ set path for my custom shell
138
     export PATH=$PATH:"${DIR_GIT}/configs/source/bash_config/bin"
139
140
     # added to get conda from cygwin (2016-08-22)
    PATH=/cygdrive/c/Users/takanori/Anaconda2:$PATH
142
    PATH=/cygdrive/c/Users/takanori/Anaconda2/Scripts:$PATH
143
144
     #| for javac
145
     #| Ref: http://stackoverflow.com/questions/4918830/how-can-i-set-my-cygwin-path-to-fipd-javac
146
    export PATH=$PATH:"/cygdrive/C/Program Files/Java/jdk1.8.0_20/bin/"
147
149
     #/ to run ipython.bat that shipped with enthrought canopy
     #export PATH=$PATH:"/cygdrive/c/users/takanori/appdata/local/enthought/canopy/user/scripts/"
150
151
   #-----#
152
   # alias to change default options of a command
153
   #-----#
154
     __bookmark_default_options____() { echo "" ; }
155
                         # raw control characters
    # alias less='less -r'
156
    alias whence='type -a'
                                   # where, of a sort
157
    alias grep='grep -P --color=always' # use perl engine as default
158
    alias egrep='egrep --color=always' # show differences in colour
159
    alias fgrep='fgrep --color=always' # show differences in colour
160
     # Some shortcuts for different directory listings
     #alias ls='ls -hF --color=tty'
                                                 # classify files in colour
163
```

```
alias ls='ls --color -h --group-directories-first' # http://superuser.com/questions/1\psi 9537/unix-ls
164
     alias dir='ls --color=auto --format=vertical'
165
     alias vdir='ls --color=auto --format=long'
166
     alias ll='ls -l'
                                               # long list
     alias la='ls -A'
                                               # all but . and ..
168
     alias l='ls -CF'
169
170
   171
   # General convenience commands (most will go here)
172
   173
      _bookmark_convenience____() { echo ""; }
174
175
     # disk space
176
177
     alias dspace='du -h --max-depth=1'
178
     alias dspace2='du -h --max-depth=1 | sort -h'
179
     alias dspace3='du -ah --max-depth=1 | sort -h'
180
181
     #http://stackoverflow.com/questions/1412423/display-only-files-and-folders-that-are-symbolic-links
182
     alias ls_sym='ls -l $(find ./ -maxdepth 1 -type l -print)'
183
184
     #http://stackoverflow.com/questions/17066250
185
     alias print_time='echo $(date +"%Y-%m-%d_%H:%M:%S")'
186
187
     #http://stackoverflow.com/questions/7110119 (history with no line-numbers)
188
     alias hist_nonum='history | cut -c 8-'
189
190
     #1 added 08-24-2016 (16:11)
191
     # remove color from stdou (wow, harder than i expected)
192
     #http://stackoverflow.com/questions/17998978/removing-colors-from-output
193
     #http://unix.stackexchange.com/questions/111899/how-to-strip-color-codes-out-of-stdout-and-pipe-to
194
     alias stripcolors='sed "s/x1B\[\([0-9]\{1,2\}\(;[0-9]\{1,2\}\)\?\)\?[mGK]//g"'
195
     tw_print_function_name(){
196
197
       # print function names defined here
198
       # (since these don't show up in $ alias
199
       #-----#
       # http://stackoverflow.com/questions/1184268/unix-sort-treatment-of-underscore-character
201
       # LC_COLLATE=C will make underscore sorted as well
202
       # (grep looks from () followed by {
203
       # sed shaves off all the last character following "()" bracket
204
       # http://stackoverflow.com/questions/3675169/how-to-shave-off-last-character-using-sed
205
       cat ~/.bash_aliases | grep "\(\)(?=\{)" | env LC_COLLATE=C sort -f | \
207
          sed "s/().*$/()/" | stripcolors
208
209
     tw csvhead() {
210
      head -1 $1 | tr ',' '\n'
211
212
213
     # http://stackoverflow.com/questions/1305237/how-to-list-variables-declared-in-script+in-bash
     alias takPrintVars='( set -o posix ; set )'
215
216
   #-----#
217
   # ssh aliases
218
   #-----#
219
      _bookmark_ssh____() { echo "" ; }
221
     #alias tak='ssh takanori@takanori.eecs.umich.edu'
```

```
#alias newberry='ssh takanori@newberry.eecs.umich.edu'
222
     #alias freewill='ssh slab@freewill.psych.med.umich.edu' # connection only supported from umich dom.
223
     #alias sshtak='ssh -L 5901:localhost:5933 takanori@takanori.eecs.umich.edu'
224
     #alias sshfree='ssh -L 5903:freewill.psych.med.umich.edu:5933 takanori@takanori.eecs.umich.edu'
225
226
     # ssh_to_tak() {
227
         ssh -L $1:localhost:$2 takanori@takanori.eecs.umich.edu
228
229
    # alias sshtak=ssh_to_tak
230
231
   232
   # run in bg (my "lazy" aliases)
   #-----#
234
     __bookmark_background___() { echo ""; }
235
    alias gitk1='gitk &'
236
237
238
   239
   # my "go" aliases to move around frequently used directories
240
   #-----#
241
      _bookmark_go_aliases____() { echo "I'm just a bookmark for sublimetext"; }
242
    alias godrop='cd "${HOME_WIN}/Dropbox"'
243
    alias gogit='cd "${HOME_WIN}/Dropbox/git"'
244
    alias godrive='cd "${HOME_WIN}/Google Drive"'
    alias gowork='cd "${HOME_WIN}/Dropbox/work/sbia_work"'
246
247
    # windows specific ones
248
    alias goahk='cd "${HOME_WIN}/Dropbox/git/configs\source\windows\autohotkey"'
249
    alias gohome='cd "${HOME_WIN}"'
250
    alias godesk='cd "${HOME_WIN}/Desktop"'
251
     # 3 sphinx notebooks I use quite often
253
    alias goconf='cd "${HOME_WIN}/Dropbox/git/configs"'
254
    alias gonotes='cd "${HOME_WIN}/Dropbox/git/coding_notes"'
255
    alias gosnippets='cd "${HOME_WIN}/Dropbox/git/snippet"'
256
257
     # location of the python modules from anacaonda
    alias gopymodules='cd "${HOME_WIN}/Anaconda2/Lib/site-packages"'
    alias golocalpymod='cd "${HOME_WIN}\\AppData\\Roaming\\Python\\Python27\\site-packages""
260
     # oh neat, double-backslash also recognized in cygwin ^^^^^^^^^^^
261
262
     # sublime config location
263
    alias gosublime='cd "${HOME_WIN}\AppData\Roaming\Sublime Text 3\Packages\User"'
264
   #-----#
266
   # handling clipboards....
267
   268
      _bookmark_clipboards____() { echo "" ; }
269
270
    # http://stackoverflow.com/questions/5130968/how-can-i-copy-the-output-of-a-command-directly-into-n
    alias c="xclip -selection clipboard"
    alias v="xclip -o -selection clipboard"
273
274
275
     # Neat function I grabbed from:
276
     # http://madebynathan.com/2011/10/04/a-nicer-way-to-use-xclip/
277
     #-----#
    cb() {
```

```
local _scs_col="\e[0;32m"; local _wrn_col='\e[1;31m'; local _trn_col='\e[0;33m'
280
       # Check that xclip is installed.
281
       if ! type xclip > /dev/null 2>&1; then
282
         echo -e "$_wrn_col""You must have the 'xclip' program installed.\e[0m"
283
       # Check user is not root (root doesn't have access to user xorg server)
284
       elif [[ "$USER" == "root" ]]; then
285
         echo -e "$ wrn_col""Must be regular user (not root) to copy a file to the clipboatd.\e[0m"
286
       else
287
         # If no tty, data should be available on stdin
288
         if ! [[ "$( tty )" == /dev/* ]]; then
289
          input="$(< /dev/stdin)"
290
         # Else, fetch input from params
291
         else
292
           input="$*"
293
         fi
294
         if [ -z "$input" ]; then # If no input, print usage message.
295
           echo "Copies a string to the clipboard."
296
           echo "Usage: cb <string>"
297
           echo "
                   echo <string> | cb"
298
         else
299
           # Copy input to clipboard
300
          echo -n "$input" | xclip -selection c
301
           # Truncate text for status
302
          if [ f input } -qt 80 ]; then input="$(echo $input | cut -c1-80)$_trn_col...\e[\phim"; fi
303
           # Print status.
          echo -e "$_scs_col""Copied to clipboard:\e[0m $input"
305
         fi
306
       fi
307
308
310
     # Aliases / functions leveraging the cb() function
311
312
                                            # Copy contents of a file
     function cbf() { cat "$1" | cb; }
313
     alias cbssh="cbf ~/.ssh/id_rsa.pub"
                                            # Copy SSH public key
314
     alias cbwd="pwd | cb"
                                              # Copy current working directory
315
     alias cbhs="cat $HISTFILE | tail -n 1 | cb" # Copy most recent command in bash history
317
318
   # Dealing with **colors**
319
   #----#
320
      _bookmark_colors____() { echo "" ; }
321
322
323
     # | added 08-24-2016 (16:11)
     # remove color from stdou (wow, harder than i expected)
324
     #http://stackoverflow.com/questions/17998978/removing-colors-from-output
325
     #http://unix.stackexchange.com/questions/111899/how-to-strip-color-codes-out-of-stdout-and-pipe-to-
326
     alias stripcolors='sed "s/x1B\[\([0-9]\{1,2\}\(;[0-9]\{1,2\}\)\?\)\?[mGK]//g"'
327
328
     #------
329
330
     # git related
     #----#
331
     #http://stackoverflow.com/questions/7066325/list-qit-aliases
332
     alias git_alias='git config --get-regexp alias | pygmentize -l sh'
333
334
     #----#
335
     # to get colored output from ``less`` on scripts
337
     # http://superuser.com/questions/117841/get-colors-in-less-command
```

```
338
     myless(){
339
      pygmentize $1 | less
340
341
342
     pyg_sh(){
343
      # pygmentize shell code
344
      pygmentize -l sh $1
345
346
347
     pyg_py(){
348
      # pygmentize python code
349
      pygmentize -l python $1
350
351
352
   353
   # Git related functions
354
   355
      __bookmark_git____() { echo "" ; }
356
     git_anonymize() {
357
      git config user.name "noname"
358
      git config user.email noname@example.com
359
360
     alias twsphinx_check='google-chrome build/html/index.html' # 08-17-2016 (13:33)
     alias twalias='alias | pygmentize -1 sh' # 08-17-2016 (13:37)
362
363
     git_clear_author_history() {
364
      git filter-branch -f --env-filter '
365
       CORRECT_NAME="your name"
       CORRECT_EMAIL="your_email@example.com"
368
369
       export GIT_COMMITTER_NAME="$CORRECT_NAME"
370
      export GIT_COMMITTER_EMAIL="$CORRECT_EMAIL"
371
372
      export GIT_AUTHOR_NAME="$CORRECT_NAME"
373
       export GIT_AUTHOR_EMAIL="$CORRECT_EMAIL"
       ' --tag-name-filter cat -- --branches --tags
375
376
377
     git_author_history_tak(){
378
       git filter-branch -f --env-filter '
379
380
381
       CORRECT_NAME="Takanori Watanabe (sbia-pc125)"
       CORRECT_EMAIL="Takanori.Watanabe@uphs.upenn.edu"
382
383
       export GIT COMMITTER NAME="$CORRECT NAME"
384
      export GIT_COMMITTER_EMAIL="$CORRECT_EMAIL"
385
386
      export GIT_AUTHOR_NAME="$CORRECT_NAME"
388
       export GIT_AUTHOR_EMAIL="$CORRECT_EMAIL"
       ' --tag-name-filter cat -- --branches --tags
389
390
391
392
   # Sublime and Sphinx related
   #-----#
      _bookmark_subl_sphinx____() { echo ""; }
395
```

```
396
     #alias open_sphinx_html='firefox_build/html/index.html'
397
     subl_() { # open both snippets and configs
       subl -n
400
       subl -a ~/Dropbox/git/configs/
401
       subl -a ~/Dropbox/git/snippet/
402
       subl -a ~/Dropbox/git/coding_notes/
403
404
     # modify snippets via sublime text
406
     alias subl_snip='subl -n -a ~/Dropbox/git/snippet'
407
408
     # to publish in github
409
     alias nojekyll='touch .nojekyll'
410
411
   #**********************************
413
   # my data-science training stuffs (obsolete...)
414
415
     # #| directory in windows form
416
     # export WINDIR_DS="C:/Users/takanori/Dropbox/git/my_notebook/data_science_training"
417
     # #/ directory in cygwin form
419
     # export DIR_DS="/cygdrive/c/Users/takanori/Dropbox/qit/my_notebook/data_science_traihing"
420
421
     #-----#
422
     # cheat sheet launcher on chrome (code probably can be cleaned up here)
423
     #-----#
     # alias cs-sublime="chrome file:///$WINDIR_DS/less_frequently_used/sublimetext_helper.html"
     # alias cs-bash="chrome file:///$WINDIR_DS/bash/bash_helper.html"
426
     # alias cs-regex="chrome file:///$WINDIR DS/bash/regexp helper.html"
427
     # alias cs-python="chrome file:///$WINDIR_DS/python/python_helper.html"
428
     # alias cs-qit="chrome file:///$WINDIR_DS/bash/qit_helper.html"
429
     # alias cs-html="chrome file:///$WINDIR_DS/html_traininghtml_helper.html"
430
     # alias cs-latex="chrome file:///$WINDIR_DS/less_frequently_used/latex_helper.html"
     # alias cs-eclipse="chrome file:///$WINDIR_DS/python/eclipse_helper.html"
432
433
434
     # data science training stuffs
435
     436
     # alias ds-diary="chrome file:///$WINDIR_DS/data_science_diary.html"
     # alias ds-todo="chrome file:///$WINDIR_DS/data_science_todo.html"
439
440
     # sublime launcher for modifying cheat-sheet markdowns (code probably can be cleaned up here)
441
442
     # old ugly version below
443
     # - alias subl-sublime='sublime "C:/Users/takanori/Dropbox/git/my_notebook/data_scien¢e_training/lo
444
     #-----#
445
     # alias subl-sublime="sublime $WINDIR_DS/less_frequently_used/sublimetext_helper.md"
446
     # alias subl-bash="sublime $WINDIR_DS/bash/bash_helper.md"
447
     # alias subl-python="sublime $WINDIR_DS/python/python_helper.md"
448
     # alias subl-git="sublime $WINDIR_DS/bash/git_helper.md"
449
     # alias subl-html="sublime $WINDIR_DS/html_training/html_helper.md"
     # alias subl-latex="sublime $WINDIR_DS/less_frequently_used/latex_helper.md"
     # alias subl-eclipse="sublime $WINDIR_DS/python/eclipse_helper.md"
452
453
```

```
454
455
     # alias ah_training='sublime "C:/Users/takanori/Dropbox/git/my_notebook/academic_hobby/ah_training
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/bash/bash_helper.md
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/bash/git_h&lper.md
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/html_training/html_help
458
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/html_training/jquery_he.
459
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/less_frequently_used/C_.
460
461
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/less_frequently_used/ma.
462
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/less_frequently_used/ma
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/less_frequently_used/R_.
     # /cygdrive/c/Users/takanori/Dropbox/git/my_notebook/data_science_training/less_frequently_used/su.
465
466
467
     # clean env variable
468
     #unset WINDIR_DS
     #unset DIR_DS
471
472
473
474
   #-----#
475
   # SNIPPETS to print out (as a self reminder)
476
   #-----#
477
   # just a bunch of reminder snippets i can print out in the shell
478
      <code>_bookmark_snip___</code>(){ echo 'no functionality. just a bookmark for sublime (use ctrl+\sharp to navigate
479
     _snip_find(){
480
       echo '
481
       find $DIR # recursively print out file directories
482
       find $PWD | grep helper.md
       find $PWD | grep helper.html | xclip
484
       find $PWD -maxdpeth 1
485
       find . -iname "*chrome*" # case insensitive
486
       find . -name "*chrome*" # case sensitive
487
       find . -iname "*chrome*" # print filenames, followed by a NULL character instead of the "newline
488
       # ignore any file containing "est" (even in the directory name) and print out rest
       # (note: -o is the OR operator...see "operator" list below)
491
       find . -wholename '*est*' -prune -o -print
492
493
       # stuffs with -type option
494
       find . d # list directories
       find . f # list regular files
       find . 1 # list symlinks
497
498
       #-----#
499
       # name vs. whilename
500
       # - suppose i have file /Data_Science/test.txt
501
       find . -iwholename "*Sci*.txt"
503
           # this will find the above file
504
       find . -iname "*Sci*.txt"
505
           # this will NOT find the above file
506
       List filenames ending in .mp3, searching in the music folder and subfolders:
507
       $ find ./music -name "*.mp3"
       Find .doc files that also start with 'questionnaire' (AND)
510
       $ find . -name '*.doc' -name questionnaire*
511
```

```
512
513
       Find .doc files that do NOT start with 'Accounts' (NOT)
       $ find . -name '*.doc' ! -name Accounts*
514
515
       ' | pygmentize -l sh
516
517
     _snip_for(){
518
       echo '
519
       for run in {1..10}
520
522
         command
       done
523
524
       # single line
525
       for run in {1..30}; do ipython t_0809c_enet_tobpnc_age.py; done
526
527
       ' | pygmentize -l sh
529
     _snip_rename(){
530
         echo '
531
         #http://unix.stackexchange.com/questions/146743/processing-multiple-extensions
532
         #https://www.gnu.org/software/bash/manual/html_node/Brace-Expansion.html
533
534
         # rename the filename part "Array" with "_PCA" for all files ending with extension .mat
535
         rename Array _PCA *.mat
536
537
         # rename png "prefix" with "normalized" in files with .png extensions
538
         rename '"'"s/prefix/normalized/'"'" *.png
539
540
         \# rename files with either .png or .pkl extension (see link on brack expansion ab\phive)
541
         # (-n will do a dry run, letting me check the rename will do what i want it to do )
542
         rename -n '"'"s/normalized/test/'"" *.{png,pkl}
543
544
         # use -n to check rename will do what i want it to do
545
         rename -n '"'"s/graphnet/elasticnet/;'"" *.m # check
546
         rename -v '"'"'s/graphnet/elasticnet/;'"'" *.m # run verbosely after checking
548
         #-----#
549
         # add suffix/prefix to files
550
         # see 2nd answer in http://stackoverflow.com/questions/208181/how-to-rename-with-prefix-suffix
551
         #-----#
552
         # rename files with extensions (to avoid directory...not robust, but does what i want most of
553
         for filename in *\.*; do echo $filename; done;
         for filename in *; do echo $filename; done; # <- this includes directory, which me not like
555
556
         for filename in *\.*; do mv "${filename}" "prefix_${filename}"; done;
557
         ' | pygmentize -l sh
558
559
560
     _snip_scp(){
561
         echo '
562
563
         # relevant options
564
         #----#
565
         #| -r : recursive
         #| -v : verbose (i probably won'"''t need)
         \#|-q:quiet
568
```

```
#------
570
          # demos
571
572
          # Copy dummy.txt to home directory in remote host:
573
          touch ~/dummy.txt
574
          scp ~/dummy.txt watanabt@cbica-cluster.uphs.upenn.edu:~/
575
576
          # copy dummy.txt on server as dummy_cp.txt to local home folder
577
          scp watanabt@cbica-cluster.uphs.upenn.edu:~/dummy.txt ~/dummy_cp.txt
578
          ' | pygmentize -l sh
579
580
581
      _snip_mogrify(){
582
          echo '
583
          mogrify -resize 50% *.png
584
          mogrify -resize 500! *.png
                                          => changes only x-axis
585
          mogrify -resize 500 *.png
                                          => changes (x,y) axis in proportion
586
          mogrify -trim *.png
587
588
          #| http://arcoleo.org/dsawiki/Wiki.jsp?page=Recursively%20run%20Mogrify%20on%20a%20Directory
589
          #| Mogrify is an image tool that comes with ImageMagick. It is useful for resizing, compressing
590
          $ find ./ -name "*.png" -exec mogrify -some_option {} \;
591
          $ find ./ -name "*.png" -exec mogrify -resize 40% {} \;
592
          ' | pygmentize -l sh
593
594
595
      _snip_pipedream(){
596
          echo '
597
          #http://unix.stackexchange.com/questions/41740/find-exec-vs-find-xargs-which-one-to-choose
598
              the -exec "{}" \; approach seems to be specific to find (i prefer unity with *args)
600
601
          #http://stackoverflow.com/questions/4509624/how-to-limit-depth-for-recursive-file-list
602
          # http://ss64.com/bash/find.html
603
          find . -maxdepth 1 -type d -exec ls -ld "{}" ";"
604
          find . -maxdepth 1 -type d -exec ls -ld \{ \}  ; # same as above
605
          find . -maxdepth 1 -type d | xargs ls -ld # same as above (i find this the most intuitive)
          ls -ld $(find . -maxdepth 1 -type d) # same as above
607
608
          # this doesnt give the same result as "xargs" approach...figure out why later
609
          find . -maxdepth 1 -type d | ls -ld
610
          ' | pygmentize -l sh
611
612
613
614
      _snip_grep_recursively(){
          echo '
615
          grep -r "texthere" .
616
617
          # You can also mention files to exclude with --exclude.
618
          grep -r --include "*.txt" texthere .
620
          # use brace expansion to allow multiple extension
621
          grep -r --include=*.{py,m} test .
622
          ' | pygmentize -l sh
623
624
625
      _snip_demo_sed(){
627
          echo '
```

```
# replace white-string with newline
628
          bash 0622_2016_rename_tobvols.sh | sed '"'"'s/ /\n/g'"'"'
629
630
          echo $PYTHONPATH
631
          /home/takanori/Dropbox/work/external-pymodules:/home/takanori/Dropbox/work/sbia_work/python/modules
632
633
          # recall, g for global replacement
634
          echo $PYTHONPATH | sed '"'"s/:/\n/g'"'"
635
          /home/takanori/Dropbox/work/external-pymodules
636
          /home/takanori/Dropbox/work/sbia_work/python/modules
637
          /home/takanori/work-local/external-python-modules/deepnet
638
          /home/takanori/mybin/spark-2.0.0-bin-hadoop2.7/python/pyspark
639
          ' | pygmentize -l sh
640
641
642
      _snip_demo_awk(){
643
          echo '
644
          ls -l | awk '"'" {printf $5 "\t" $9"\n"}'""
645
646
               http://stackoverflow.com/questions/2021982/awk-without-printing-newline
647
               http://askubuntu.com/questions/231995/how-to-separate-fields-with-space-or-tab-in-awk
648
               http://www.catonmat.net/blog/awk-one-liners-explained-part-one/
649
               http://www.staff.science.uu.nl/~oostr102/docs/nawk/nawk_41.html
650
          ' | pygmentize -l sh
651
652
653
      _snip_computer_info(){
654
          echo '
655
          # get cpu information
656
          cat /proc/cpuinfo
657
658
          #-- see gnome version ---
659
          gnome-shell --version
660
          lsb release -a
661
662
          # to figure out which linux distribution you are using
663
          # (ref: http://www.cyberciti.biz/faq/find-linux-distribution-name-version-number/
          cat /etc/*-release
666
          locate libfortran.so
667
          ' | pygmentize -1 sh
668
669
670
671
      _snip_demo_timestamp(){
672
          echo $ (date + "%Y - %m - %d_%H: %M: %S")
673
           ' | pygmentize -l sh
674
675
676
      _snip_ls_symlink_only(){
          echo '
678
          # aliased as ls_sym
679
          ls -l $(find ./ -maxdepth 1 -type l -print)
680
           ' | pygmentize -l sh
681
682
683
      _snip_github_clone_branch(){
          echo '
685
```

```
#http://stackoverflow.com/questions/1911109/clone-a-specific-git-branch
686
          # skeleton
687
          git clone -b my-branch git@github.com:user/myproject.git local_folder_name
688
689
690
          qit clone -b minimalist https://github.com/wtak23/sphinx_skeleton.git jinja2
691
           ' | pygmentize -l sh
692
693
694
      _snip_moving_and_copying(){
695
        echo '
696
        # rename a directory (note '/' after directory name has NO impact here, there are cases I should
697
        mv /home/user/oldname /home/user/newname
698
699
        #=== cp helper ===#
700
        # copy files *inside* the folder "test/" inside folder "target"
701
        gosnippets; cd tests; mkdir source target; cd source; touch a b c; cd ..
702
703
        # copy files *inside* the folder "test/" inside folder "target" (note: -R and -r are the same he
704
        cp -r source/* target
705
706
        # copy entire folder *source* into *target* (without ``-r``, the subdirectories wont get copied)
707
        cp -r source* target
708
709
        #--- cleanup test files from above---#
710
        cd ..; rm -r tests/*
711
712
713
        #--- remove entire directory including files inside recursively ---#
714
        rm -rf test/
715
         ' | pygmentize -l sh
716
717
718
      _snip_ps(){
719
          echo '
720
          # a <- includes ``root`` in userprocess</pre>
721
          # u <- include ``username`` column</pre>
722
          \# x <- list all processes owned by me
723
          ps aux
724
          ' | pygmentize -l sh
725
726
727
      _snip_git_localname(){
728
729
          echo '
          # change user name in local repository
730
          # https://qit-scm.com/book/en/v2/Customizing-Git-Git-Configuration
731
          git config user.name "noname"
732
          git config user.email noname@example.com
733
           ' | pygmentize -l sh
734
735
736
      _snip_stdout_stderr() {
737
          echo '
738
739
          # Output stdout and stderr to terminal and logfile
740
741
742
          # http://stackoverflow.com/questions/418896/how-to-redirect-output-to-a-file-and-$tdout
743
          # http://stackoverflow.com/questions/18460186/writing-outputs-to-log-file-and-console
```

```
#***********
744
         # save stdout and stderr to a file
745
         bash mymake.sh >> log.txt 2>&1
746
         # save logfile like above, but also print on terminal screen
748
        bash mymake.sh 2>&1 | tee log.txt
749
         ' | pygmentize -l sh
750
751
752
     _snip_logout(){  # just a wrapper to _snip_stdout_stderr (this one may have better mneumonic)
753
         _snip_stdout_stderr
754
755
756
     _snip_python_simple_http_server(){
757
        echo '
758
         # for status messages, see: http://www.w3schools.com/tags/ref_httpmessages.asp
759
        python -m SimpleHTTPServer 8000 &
760
         firefox "http://localhost:8000/"
761
         ' | pygmentize -l sh
762
763
764
   #****************************
765
   # Everything below here are unsorted. Categorized later.
   # Last organized: 04 September 2016 (Sunday)
   #********************************
768
      _bookmark_unsorted____() { echo "I'm unsorted" ; }
769
770
771
772
   #_____#
773
   # trying to get jupyter and pyspark
774
775
   #http://www.cloudera.com/documentation/enterprise/5-5-x/topics/spark_ipython.html
776
   # export PYSPARK_DRIVER_PYTHON='C:\Users\takanori\Anaconda2\Scripts\ipython'
777
   # export PYSPARK_PYTHON='"C:\Users\takanori\Anaconda2\python"'
   # export PYSPARK_DRIVER_PYTHON='"C:\Users\takanori\Anaconda2\Scripts\jupyter"'
   # export PYSPARK_DRIVER_PYTHON_OPTS="notebook --NotebookApp.open_browser=False --NotebookApp.ip='*'
   # export PYSPARK_PYTHON='"C:\Users\takanori\Anaconda2\python"'
781
782
   # http://stackoverflow.com/questions/33064031/link-spark-with-ipython-notebook/33065359#33065359
783
   # PATH=$PATH: "C:\spark-2.0.0-bin-hadoop2.7\bin"
784
   # PYSPARK_DRIVER_PYTHON=ipython
785
   # PYSPARK_DRIVER_PYTHON_OPTS="'notebook' pyspark"
```

2.2.4 apt-cyg

- Use this to get an apt-get like feel in cygwin (https://code.google.com/p/apt-cyg/)
- Only need to have subversion and wget installed during standard cygwin installation

Installation (run on cygwin)

```
svn --force export http://apt-cyg.googlecode.com/svn/trunk/ /bin/
chmod +x /bin/apt-cyg
```

• apt-cyg install may give you md5sum error...replace md5sum with sha512sum in 2 lines of code in /usr/bin/apt-cyg

```
(ref1, ref2)
```

Example usage

```
apt-cyg install xclip
```

Things I install on most of my computers

```
apt-cyg install xinit
apt-cyg install emacs
apt-cyg install git
apt-cyg install gitk
apt-cyg install bash-completion
apt-cyg install gcc-core
apt-cyg install gcc-g++
apt-cyg install gcc-fortran
apt-cyg install make
apt-cyg install rsync
apt-cyg install diffutils # diff
apt-cyg install xorgs-x11-base # X windows
apt-cyg install screen # terminal multiplexer
apt-cyg install xclip
#===== getting MinGW for c/c++ working ======#
# ref: http://www.plustar.jp/lab/blog/?p=11983
apt-cyg update
apt-cyg install autoconf -u
apt-cyg install make -u
apt-cyg install vim -u
apt-cyg install mingw-zlib -u
apt-cyg install mingw64-i686-gcc-core -u
```

2.2.5 git related stuffs

github sshkey

https://help.github.com/articles/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent/

```
ssh-keygen -t rsa -b 4096 -C takwatanabe2004@gmail.com
```

git code completion

Copy and paste the file git under C:\cygwin64\etc\bash_completion.d to enable code completion with <tab> for git commands.

2.2.6 Random overflows

• http://stackoverflow.com/questions/9637601/open-cygwin-at-a-specific-folder

```
apt-cyg install chere
chere -i -t mintty # <- run as admin
```

to get git gui working...

http://stackoverflow.com/questions/9393462/cannot-launch-git-gui-using-cygwin-on-windows

Just do

```
apt-cyg install xinit
export DISPLAY=:0.0
```

xming setup

http://superuser.com/questions/750434/font-size-with-xming-x11-forwarding-too-small

```
# font size a bit too small...
"C:\Program Files (x86)\Xming\Xming.exe" :0 -clipboard -multiwindow"
# increase
"C:\Program Files (x86)\Xming\Xming.exe" :0 -clipboard -multiwindow -dpi 108"
```

disable annoying bell sound in cygwin

http://stackoverflow.com/questions/1731700/how-do-i-turn-the-beep-slash-bell-off-in-cygwin

Add set bell-style none to .inputrc in your home directory

2.3 Default bash config files (bash-defaults.rst)

Contents

- Default .bashrc, ubuntu
- Default .bashrc, cygwin

2.3.1 Default .bashrc, ubuntu

Remark on location of the default

- http://askubuntu.com/questions/404424/how-do-i-restore-bashrc-to-its-default
 - should be at /etc/skel/.bashrc, but couldn't find it (no file exists)
- http://stackoverflow.com/questions/14963767/bashrc-in-cygwin-1-7
 - for cygwin, this worked

Original .bashrc file content (taken from here)

```
.. literalinclude:: ./.bashrc_default_ubuntu
    :language: bash
    :linenos:
```

```
# ~/.bashrc: executed by bash(1) for non-login shells.
   # see /usr/share/doc/bash/examples/startup-files (in the package bash-doc)
2
   # for examples
3
4
   # If not running interactively, don't do anything
   [ -z "$PS1" ] && return
   # don't put duplicate lines in the history. See bash(1) for more options
   # ... or force ignoredups and ignorespace
   HISTCONTROL=ignoredups:ignorespace
10
11
   # append to the history file, don't overwrite it
12
   shopt -s histappend
13
14
   # for setting history length see HISTSIZE and HISTFILESIZE in bash(1)
15
   HISTSIZE=1000
16
   HISTFILESIZE=2000
17
   # check the window size after each command and, if necessary,
   # update the values of LINES and COLUMNS.
   shopt -s checkwinsize
22
   # make less more friendly for non-text input files, see lesspipe(1)
23
   [ -x /usr/bin/lesspipe ] && eval "$(SHELL=/bin/sh lesspipe)"
24
25
   # set variable identifying the chroot you work in (used in the prompt below)
26
   if [ -z "$debian_chroot" ] && [ -r /etc/debian_chroot ]; then
27
       debian_chroot=$(cat /etc/debian_chroot)
28
29
30
   # set a fancy prompt (non-color, unless we know we "want" color)
31
   case "$TERM" in
32
       xterm-color) color_prompt=yes;;
   esac
35
   # uncomment for a colored prompt, if the terminal has the capability; turned
36
   # off by default to not distract the user: the focus in a terminal window
37
   # should be on the output of commands, not on the prompt
38
   #force_color_prompt=yes
39
41
   if [ -n "$force_color_prompt" ]; then
       if [ -x /usr/bin/tput ] && tput setaf 1 >&/dev/null; then
42
       # We have color support; assume it's compliant with Ecma-48
43
       # (ISO/IEC-6429). (Lack of such support is extremely rare, and such
44
       # a case would tend to support setf rather than setaf.)
45
       color_prompt=yes
46
47
       else
       color_prompt=
48
       fi
49
   fi
50
51
52
   if [ "$color_prompt" = yes ]; then
       PS1='\$\{debian\_chroot:+(\$debian\_chroot)\}\\[033[01;32m]]\\u@\h[033[00m]]:\\[033[01;34m]]\\w\\[033[01;34m]]
53
   else
```

```
PS1='${debian_chroot:+($debian_chroot)}\u@\h:\w\$'
   fi
   unset color_prompt force_color_prompt
57
58
   # If this is an xterm set the title to user@host:dir
59
   case "$TERM" in
60
   xterm*|rxvt*)
61
       PS1="\[\e]0; ${debian_chroot:+($debian_chroot)}\u@\h: \w\a\]$PS1"
62
   *)
65
        ;;
   esac
66
67
   # enable color support of 1s and also add handy aliases
68
   if [ -x /usr/bin/dircolors ]; then
69
        test -r ~/.dircolors && eval "$(dircolors -b ~/.dircolors)" || eval "$(dircolors -b)"
70
        alias ls='ls --color=auto'
71
        #alias dir='dir --color=auto'
72
        #alias vdir='vdir --color=auto'
73
74
        alias grep='grep --color=auto'
75
        alias fgrep='fgrep --color=auto'
76
        alias egrep='egrep --color=auto'
   fi
   # some more ls aliases
80
   alias ll='ls -alF'
81
   alias la='ls -A'
82
   alias l='ls -CF'
   # Add an "alert" alias for long running commands. Use like so:
       sleep 10; alert
86
   alias alert='notify-send --urgency=low -i "$([ $? = 0 ] && echo terminal || echo error) "
                                                                                                    "$ (history|
87
88
   # Alias definitions.
89
   # You may want to put all your additions into a separate file like
   # ~/.bash_aliases, instead of adding them here directly.
   # See /usr/share/doc/bash-doc/examples in the bash-doc package.
92
93
   if [ -f ~/.bash_aliases ]; then
94
        . ~/.bash_aliases
95
   fi
   # enable programmable completion features (you don't need to enable
   # this, if it's already enabled in /etc/bash.bashrc and /etc/profile
   # sources /etc/bash.bashrc).
100
    \begin{tabular}{ll} \textbf{if} & [ -f /etc/bash\_completion ] & \& ! shopt -oq posix; \end{tabular} 
101
        . /etc/bash_completion
102
   fi
```

2.3.2 Default .bashrc, cygwin

Original from /etc/skel/.bashrc

```
.. literalinclude:: ./.bashrc_default_cygwin
    :language: bash
    :linenos:
```

```
# To the extent possible under law, the author(s) have dedicated all
   # copyright and related and neighboring rights to this software to the
2
   # public domain worldwide. This software is distributed without any warranty.
3
   # You should have received a copy of the CCO Public Domain Dedication along
   # with this software.
   # If not, see <a href="http://creativecommons.org/publicdomain/zero/1.0/">http://creativecommons.org/publicdomain/zero/1.0/>.
6
   # base-files version 4.2-3
   # ~/.bashrc: executed by bash(1) for interactive shells.
10
11
   # The latest version as installed by the Cygwin Setup program can
12
   # always be found at /etc/defaults/etc/skel/.bashrc
13
14
   # Modifying /etc/skel/.bashrc directly will prevent
15
   # setup from updating it.
16
17
   # The copy in your home directory (~/.bashrc) is yours, please
18
   # feel free to customise it to create a shell
19
   # environment to your liking. If you feel a change
20
   # would be benifitial to all, please feel free to send
21
   # a patch to the cygwin mailing list.
22
23
   # User dependent .bashrc file
   # If not running interactively, don't do anything
26
   [[ "$-" != *i* ]] && return
27
28
   # Shell Options
29
30
31
   # See man bash for more options...
32
   # Don't wait for job termination notification
33
   # set -o notify
34
35
   # Don't use ^D to exit
36
   # set -o ignoreeof
   # Use case-insensitive filename globbing
39
   # shopt -s nocaseglob
40
41
   # Make bash append rather than overwrite the history on disk
42
   # shopt -s histappend
43
44
45
   # When changing directory small typos can be ignored by bash
   # for example, cd /vr/lqo/apaache would find /var/log/apache
46
   # shopt -s cdspell
47
48
   # Completion options
49
51
   # These completion tuning parameters change the default behavior of bash_completion:
52
   # Define to access remotely checked-out files over passwordless ssh for CVS
53
   # COMP_CVS_REMOTE=1
54
55
   # Define to avoid stripping description in --option=description of './configure --help'
56
   # COMP_CONFIGURE_HINTS=1
57
58
```

```
# Define to avoid flattening internal contents of tar files
   # COMP_TAR_INTERNAL_PATHS=1
60
61
    # Uncomment to turn on programmable completion enhancements.
62
63
    # Any completions you add in ~/.bash_completion are sourced last.
    # [[ -f /etc/bash_completion ]] && . /etc/bash_completion
64
65
    # History Options
66
67
    # Don't put duplicate lines in the history.
   # export HISTCONTROL=$HISTCONTROL${HISTCONTROL+,}ignoredups
   # Ignore some controlling instructions
71
   # HISTIGNORE is a colon-delimited list of patterns which should be excluded.
72
   # The '&' is a special pattern which suppresses duplicate entries.
73
   # export HISTIGNORE=$'[ \t]*:&:[fb]g:exit'
74
    \# export HISTIGNORE=\$'[ \t] *: \&: [fb]g: exit: ls' <math>\# Ignore the 1s command as well
75
76
    # Whenever displaying the prompt, write the previous line to disk
77
   # export PROMPT_COMMAND="history -a"
78
79
   # Aliases
80
81
   # Some people use a different file for aliases
    # if [ -f "${HOME}/.bash_aliases" ]; then
   # source "${HOME}/.bash_aliases"
84
   # fi
85
86
   # Some example alias instructions
87
   # If these are enabled they will be used instead of any instructions
88
   # they may mask. For example, alias rm='rm -i' will mask the rm
   # application. To override the alias instruction use a \ before, ie
   # \rm will call the real rm not the alias.
91
92
   # Interactive operation...
93
   # alias rm='rm -i'
   # alias cp='cp -i'
   # alias mv='mv -i'
   # Default to human readable figures
98
   # alias df='df -h'
99
   # alias du='du -h'
100
101
   # Misc :)
103
   # alias less='less -r'
                                                      # raw control characters
   # alias whence='type -a'
                                                      # where, of a sort
104
                                                      # show differences in colour
   # alias grep='grep --color'
105
   # alias egrep='egrep --color=auto'
                                                      # show differences in colour
   # alias fgrep='fgrep --color=auto'
                                                      # show differences in colour
107
   # Some shortcuts for different directory listings
   # alias ls='ls -hF --color=tty'
                                                      # classify files in colour
   # alias dir='ls --color=auto --format=vertical'
111
   # alias vdir='ls --color=auto --format=long'
112
   # alias ll='ls -l'
                                                      # long list
113
   # alias la='ls -A'
                                                      # all but . and ..
114
   # alias l='ls -CF'
115
116
```

```
# Umask
117
118
    # /etc/profile sets 022, removing write perms to group + others.
119
    # Set a more restrictive umask: i.e. no exec perms for others:
120
121
    # umask 027
   # Paranoid: neither group nor others have any perms:
122
   # umask 077
123
124
   # Functions
125
   # Some people use a different file for functions
   # if [ -f "${HOME}/.bash_functions" ]; then
128
   # source "${HOME}/.bash_functions"
129
   # fi
130
131
    # Some example functions:
132
133
134
    # a) function settitle
    # settitle ()
135
136
      echo -ne "\e]2;$@\a\e]1;$@\a";
137
   # }
138
139
   # b) function cd_func
   # This function defines a 'cd' replacement function capable of keeping,
   # displaying and accessing history of visited directories, up to 10 entries.
142
   # To use it, uncomment it, source this file and try 'cd --'.
143
   # acd_func 1.0.5, 10-nov-2004
144
   # Petar Marinov, http://geocities.com/h2428, this is public domain
145
   # cd_func ()
146
        local x2 the_new_dir adir index
148
        local -i cnt
149
150
        if [[ $1 == "--" ]]; then
151
        dirs -v
152
         return 0
    #
        fi
155
       the_new_dir=$1
156
        [[ -z $1 ]] && the_new_dir=$HOME
157
158
        if [[ ${the_new_dir:0:1} == '-' ]]; then
159
160
161
          # Extract dir N from dirs
          index=${the_new_dir:1}
162
         [[ -z $index ]] && index=1
163
          adir=$(dirs +$index)
164
         [[ -z $adir ]] && return 1
165
         the_new_dir=$adir
        fi
168
169
        # '~' has to be substituted by ${HOME}
170
        [[ ${the_new_dir:0:1} == '~' ]] && the_new_dir="${HOME}${the_new_dir:1}"
171
172
173
174
        # Now change to the new dir and add to the top of the stack
```

```
pushd "${the_new_dir}" > /dev/null
175
        [[ $? -ne 0 ]] && return 1
176
        the_new_dir=$(pwd)
177
179
        # Trim down everything beyond 11th entry
180
        popd -n +11 2>/dev/null 1>/dev/null
181
182
        # Remove any other occurence of this dir, skipping the top of the stack
        for ((cnt=1; cnt <= 10; cnt++)); do
185
          x2=$(dirs +${cnt} 2>/dev/null)
186
          [[ $? -ne 0 ]] && return 0
187
          [[ $\{x2:0:1\} == '~' ]] \&\& x2="$\{HOME\}$\{x2:1\}"
188
          if [[ "${x2}" == "${the_new_dir}" ]]; then
189
            popd -n +$cnt 2>/dev/null 1>/dev/null
            cnt = cnt - 1
191
192
        done
193
194
        return 0
195
    # }
196
    # alias cd=cd_func
```

CHAPTER

THREE

SUBLIME TEXT SETUP (SUBLIME.RST)

Last updated: 08-27-2016 (22:35)

3.1 SBIA Workstation (subl-sbia.rst)

The two most important files:

- 1. Preferences.sublime-settings global setup
- 2. Default (Linux).sublime-keymap keyboard shortcuts
- (saved as keyboard_shortcut_sbia.sublime-keymap locally)

Contents

- File-tree
- Symbolic links created
 - File-wise setup
- Installed packges
- Preferences.sublime-settings Content
- Default (Linux).sublime-keymap Content

3.1.1 File-tree

Important: Reupdated on 08-27-2016 (23:25) when creating this repos.

```
$ tree -L 1 --dirsfirst
.
-- snippets
-- synced_by_files
-- synced_by_folder
-- keyboard_shortcut_sbia.sublime-keymap
-- Preferences_sbia.sublime-settings
-- sublime.references.rst
-- sublime.sbia.setup.rst
3 directories, 4 files
```

synced_by_folders

- contains files that must directly reside under ~/.config/sublime-text-3/Packages/User (subfolders not allowed)
- examples: *.sublime-settings, *.sublime-macros
- snippets
 - contains my sublime **snippets** (gawd I love this functionality)
- · synced by files
 - contains files that can be synced as subfolders in User directory in Sublime

3.1.2 Symbolic links created

File-wise setup

- macros and sublime-setting files must be copied directly under the User directory
- I manually reupdate these every once in a while

Last update: 09-01-2016 (16:56)

```
SOURCE="${HOME}/Dropbox/git/configs/source/sublime/synced_by_files"
TARGET="${HOME}/.config/sublime-text-3/Packages/User"

# custom macros
ln -s "${SOURCE}/add_date.py" "${TARGET}/add_date.py"
ln -s "${SOURCE}/my_shift_newLine.sublime-macro" "${TARGET}/my_shift_newLine.sublime-macro"

# *.sublime-settings file
ln -s "${SOURCE}/Diff.sublime-settings" "${TARGET}"
ln -s "${SOURCE}/Anaconda.sublime-settings" "${TARGET}"
ln -s "${SOURCE}/FoldPython.sublime-settings" "${TARGET}"
ln -s "${SOURCE}/OmniMarkupPreviewer.sublime-settings" "${TARGET}"
ln -s "${SOURCE}/Python.sublime-settings" "${TARGET}"
ln -s "${SOURCE}/BufferScroll.sublime-settings" "${TARGET}"

# to see what i installed
ln -s "/home/takanori/Dropbox/git/configs/source/sublime/Package Control_sbia.sublime-settings" \
"/home/takanori/.config/sublime-text-3/Packages/User/Package Control.sublime-settings"
```

3.1.3 Installed packges

```
.. literalinclude:: Package Control_sbia.sublime-settings
    :language: json
    :linenos:
```

```
"bootstrapped": true,
2
            "in_process_packages":
3
            Γ
            "installed_packages":
            [
                     "AdvancedNewFile",
                     "All Autocomplete",
                     "Better Completion",
10
                     "BetterFindBuffer",
11
                     "BracketHighlighter",
12
                     "BufferScroll",
13
                     "Clipboard Manager",
14
                     "ColorPicker",
15
                     "Diffy",
16
                     "FileDiffs",
17
                     "Fold Comments",
                     "Fold Python",
                     "Git",
20
                     "GitGutter",
21
22
                     "HTML-CSS-JS Prettify",
                     "Jinja2",
23
                     "LaTeX-cwl",
24
                     "LaTeXTools",
25
                     "Markdown Preview",
26
                     "OmniMarkupPreviewer",
27
                     "Origami",
28
                     "Package Control",
29
                     "PackageResourceViewer",
30
                     "Pylinter",
31
                     "R-Box",
                     "SFTP",
                     "SideBarEnhancements",
34
35
                     "SideBarFolders",
                     "SideBarGit",
36
                     "SublimeREPL",
37
                     "TabsExtra",
38
                     "Terminal",
                     "Theme - Soda",
40
                     "Theme - Soda SolarizedDark",
41
                     "Theme - SoDaReloaded",
42.
                     "Tomorrow Color Schemes",
43
                     "TrailingSpaces",
44
                     "View In Browser"
45
            ]
```

```
$ cd ~/.config//sublime-text-3/Installed\ Packages/
$ ls -1
0_package_control_loader.sublime-package
AdvancedNewFile.sublime-package
```

```
All Autocomplete.sublime-package
BracketHighlighter.sublime-package
BufferScroll.sublime-package
Clipboard Manager.sublime-package
Diffy.sublime-package
FileDiffs.sublime-package
Fold Comments.sublime-package
Fold Python.sublime-package
GitGutter.sublime-package
Git.sublime-package
LaTeX-cwl.sublime-package
Markdown Preview.sublime-package
Origami.sublime-package
Package Control.sublime-package
PackageResourceViewer.sublime-package
R-Box.sublime-package
SideBarEnhancements.sublime-package
SideBarFolders.sublime-package
SideBarGit.sublime-package
SyncedSideBar.sublime-package
TabsExtra.sublime-package
Theme - SoDaReloaded.sublime-package
Theme - Soda SolarizedDark.sublime-package
Theme - Soda.sublime-package
Tomorrow Color Schemes.sublime-package
TrailingSpaces.sublime-package
View In Browser.sublime-package
```

3.1.4 Preferences.sublime-settings Content

```
.. literalinclude:: Preferences_sbia.sublime-settings
:language: json
:linenos:
```

```
"always_show_minimap_viewport": true,
           "animation_enabled": true,
           "auto_close_tags": true,
           "auto complete": true,
           "auto complete commit on tab": true,
           "auto_complete_delay": 50,
           "auto_complete_selector": "source - comment, meta.tag - punctuation.definition.dag.begin",
           "auto_complete_size_limit": 4194304,
           "auto_complete_triggers":
10
11
12
                            "characters": "<",
13
                            "selector": "text.html"
                    }
           "auto_complete_with_fields": true,
17
           "auto indent": true,
18
            "auto match enabled": false,
19
            "binary_file_patterns":
20
```

```
"*.ttf",
22
                     "*.tga",
23
                      "*.dds",
24
                      "*.ico",
25
                      "*.eot",
26
                      "*.pdf",
27
                      "*.swf",
28
                      "*.jar",
29
                      "*.zip"
30
31
            "bold_folder_labels": true,
32
            "caret_extra_bottom": 1,
33
            "caret_extra_top": 1,
34
            "caret_extra_width": 0,
35
            "caret_style": "smooth",
36
             "color_scheme": "Packages/Color Scheme - Default/Eiffel.tmTheme",
37
            "detect_indentation": true,
38
39
             "draw_minimap_border": true,
             "ensure_newline_at_eof_on_save": false,
40
             "fade_fold_buttons": false,
41
            "file_exclude_patterns":
42.
43
             [
                     ".DS_Store",
44
                     "*.pid",
                     "*.pyc",
46
                     "*.blg",
47
                     "*.mat",
48
                     "*.xlsx",
49
                      "*.pdf"
50
51
            "find_selected_text": true,
52
            "fold_buttons": true,
53
            "folder_exclude_patterns":
54
55
             Γ
                      ".git",
56
                      "__pycache___",
57
                     "env",
                     "env3",
                     "build",
60
                      "build_published",
61
                      "ignore_dir"
62
63
            "font_size": 8,
65
             "gutter": true,
            "highlight_line": true,
66
             "highlight_modified_tabs": true,
67
             "ignored_packages":
68
             [
69
                      "AdvancedNewFile",
70
                     "Gist",
                     "GitGutter",
73
                     "Local History",
                     "Pylinter",
74
                      "Vintage"
75
76
            "indent_subsequent_lines": true,
77
            "indent_to_bracket": false,
            "line_numbers": true,
```

```
"line_padding_bottom": -0.5,
80
            "line_padding_top": -0.5,
            "margin": 0,
            "match_brackets": true,
83
            "match_brackets_angle": true,
            "match brackets braces": true,
85
            "match_brackets_content": true,
86
            "match_brackets_square": true,
87
            "match_selection": true,
            "match_tags": true,
            "overlay_scroll_bars": "system",
            "rulers":
91
            ſ
92
                     79,
93
                     120
            "scroll_past_end": true,
            "scroll_speed": 1.0,
97
            "shift_tab_unindent": false,
98
            "show_encoding": true,
            "show_line_endings": true,
100
            "show_tab_close_buttons": true,
101
            "smart_indent": true,
102
            "soda_folder_icons": false,
103
            "tab_completion": true,
104
            "tab_size": 4,
105
            "theme": "Soda Light 3.sublime-theme",
106
            "translate_tabs_to_spaces": true,
            "tree_animation_enabled": true,
            "trim_automatic_white_space": true,
            "update_check": false,
110
            "use_tab_stops": true,
111
            "wide_caret": true,
112
            "word_wrap": "true",
113
            "wrap_width": 81
```

3.1.5 Default (Linux).sublime-keymap Content

Github

```
.. literalinclude:: keyboard_shortcut_sbia.sublime-keymap
    :language: javascript
    :linenos:
```

```
13
          "keys": ["alt+w"], "command": "literal", "context":
14
15
             { "key": "selector", "operator": "equal", "operand": "text.restructuredtext" }
16
17
      },
18
      {
19
             "keys": ["alt+a"], "command": "emphasis", "context":
20
21
                { "key": "selector", "operator": "equal", "operand": "text.restructuredtext" }
22
23
24
      // switching focus http://stackoverflow.com/questions/11995591/sublime-text-2-show-file-navigati
25
      { "keys": ["ctrl+1"], "command": "focus_side_bar" }, // default is ctrl+0
26
27
      //{ "keys": ["ctrl+d"], "command": "run_macro_file", "args": {"file": "res://Packages/Default/De.
28
      { "keys": ["ctrl+shift++"], "command": "header_change_level", "context":
29
30
             { "key": "selector", "operator": "equal", "operand": "text.restructuredtext" }
31
32
      },
33
      //-----//
34
      // http://stackoverflow.com/questions/11879481/can-i-add-date-time-for-sublime-snippet
35
      //-----//
      {"keys": ["ctrl+shift+,"], "command": "add_date" },
37
      {"keys": ["ctrl+shift+."], "command": "add_time" },
38
39
      //-----//
40
      // for some reason code folding stopped working....so copied and pasted this
41
      // from default file (10/5/2015)
42
      //=======//
43
      { "keys": ["ctrl+k", "ctrl+1"], "command": "fold_by_level", "args": {"level": 1} },
44
      { "keys": ["ctrl+k", "ctrl+2"], "command": "fold_by_level", "args": {"level": 2} },
45
      { "keys": ["ctrl+k", "ctrl+3"], "command": "fold_by_level", "args": {"level": 3} },
46
      { "keys": ["ctrl+k", "ctrl+4"], "command": "fold_by_level", "args": {"level": 4} },
47
      { "keys": ["ctrl+k", "ctrl+5"], "command": "fold_by_level", "args": {"level": 5} },
48
      { "keys": ["ctrl+k", "ctrl+6"], "command": "fold_by_level", "args": {"level": 6} },
49
      { "keys": ["ctrl+k", "ctrl+7"], "command": "fold_by_level", "args": {"level": 7} },
      { "keys": ["ctrl+k", "ctrl+8"], "command": "fold_by_level", "args": {"level": 8} },
51
      { "keys": ["ctrl+k", "ctrl+9"], "command": "fold_by_level", "args": {"level": 9} },
52
      { "keys": ["ctrl+k", "ctrl+0"], "command": "unfold_all" },
53
      { "keys": ["ctrl+k", "ctrl+j"], "command": "unfold_all" },
54
55
56
      // https://github.com/alecthomas/SublimeFoldPythonDocstrings
57
      { "keys": ["super+alt+c"], "command": "fold_python_docstrings" },
      { "keys": ["super+alt+v"], "command": "unfold_python_docstrings" },
58
59
      //-----//
60
      // http://www.sublimetext.com/forum/viewtopic.php?f=2&t=9204
61
      // (in linux ctrl+space doesn't autocomplete
62
      //-----//
63
      { "keys": ["ctrl+space"], "command": "auto_complete" },
64
65
      //-----//
66
      // Anaconda
67
      // https://github.com/DamnWidget/anaconda/blob/master/Default.sublime-commands
68
      //=----//
      {"command": "anaconda_doc", "keys": ["alt+shift+d"]},
```

```
{"command": "anaconda_get_lines", "keys": ["alt+shift+w"]},
71
       {"command": "anaconda_find_usages", "keys": ["alt+shift+f"]},
72
       {"command": "anaconda_auto_format", "keys": ["alt+shift+r"]},
73
       {"command": "anaconda_goto", "keys": ["alt+shift+g"]},
74
75
76
       { "keys": ["f5"], "command": "toggle_minimap" },
77
       { "keys": ["shift+f5"], "command": "revert" },
78
79
       { "keys": ["alt+`"], "command": "insert", "args": {"characters": "`"} },
80
       { "keys": ["ctrl+shift+b"], "command": "build", "args": {"variant": "Run"} },
81
82
       // (11/26/2014) For sidebar-toggle (like in foxit, adobe)
83
       { "keys": ["f4"], "command": "toggle_side_bar" },
84
85
86
       // "prettifies" html codes
87
       88
       // { "keys": ["alt+shift+r"], "command": "reindent"},
89
90
       { "keys": ["ctrl+q"], "command": "exit" },
91
       // "cmd": ["C:\\Users\\takanori\\AppData\\Local\\Pandoc\\pandoc.exe",
92
       // "-f", "markdown", "-t", "html",
93
       // "-s", "-S", "--toc", "--highlight-style", "kate",
       // "$file_base_name.md", "-o", "$file_base_name.html"],
       // "selector": "text.html.markdown",
96
97
      // { "keys": ["ctrl+shift+b"], "command": "open_file", "args": { "file": "$ { file_base_name } .html"
98
       // { "keys": ["ctrl+shift+b"], "command": "exec", "args": { "cmd":
100
101
       // ["${file_base_name}.html"]} },
102
       // { "keys": ["ctrl+shift+b"], "command": "exec", "args": { "cmd":
103
       // ["C:\Program Files (x86)\Google\Chrome\Application\\chrome.exe ${dir}.html"]} },
104
105
       // "super" = windows key
106
       { "keys": ["super+alt+space"], "command": "toggle_setting", "args": {"setting": "word_wrap"} },
108
       { "keys": [ "alt+f1" ], "command": "view_in_browser" },
109
110
       //-----//
111
       // (09/10/2014) I freagin' hate the "smart_list" from "smartmarkdown", so diable
112
       113
       { "keys": ["enter"], "command": "insert", "args": {"characters": "\n"}},
114
       // Also not a fan of them over-riding "shift+tab" which I use for unindenting
115
       { "keys": ["shift+tab"], "command": "unindent"},
116
       { "keys": ["shift+tab"], "command": "prev_field", "context":
117
          [
118
              { "key": "has_prev_field", "operator": "equal", "operand": true }
119
120
121
       },
122
       123
       // (08/24/2014) For down all comments (using "Fold comments" package) and top level folds
124
       // (09/15/2015) disabled it since this messes up default code folding
125
       //-----//
126
       // { "keys": ["ctrl+k"], "command": "fold_by_level", "args": {"level": 1} },
127
       { "keys": ["alt+shift+c"], "command": "toggle_fold_comments" }
128
```

```
129
     //-----//
130
     // For markdown preivew https://sublime.wbond.net/packages/Markdown%20Preview (08/22/2014)
131
     //-----//
132
     { "keys": ["ctrl+shift+b"], "command": "markdown_preview"},
133
     // { "keys": ["alt+m"], "command": "markdown_preview_select", "args": {"target": "browser"} },
134
135
     136
     // Diffy https://sublime.wbond.net/packages/Diffy
137
     //-----//
138
     { "kevs": ["ctrl+k", "ctrl+d"], "command": "diffy" },
139
     { "keys": ["ctrl+k", "ctrl+c"], "command": "diffy", "args": {"action": "clear"} },
140
141
142
     // Ref: http://sublime-text-unofficial-documentation.readthedocs.org/en/latest/reference/key_bind
143
     144
     // { "keys": ["ctrl+alt+m"], "command": "markdown_preview", "args": {"target": "browser", "parse.
146
     //%-----%
147
     // - below only needed if the "Terminal package" is turned on, as the package over-rides the key.
148
     // (i wanna use when reopening closed tabs (08/11/2014 10:22))
149
150
     // - i only use the terminal package for linux, since windows dos sux...
     151
     { "keys": ["ctrl+shift+t"], "command": "reopen_last_file" },
152
153
154
     // for "trainingSpace package
155
     156
     // "t" toggle "t" trailing spaces
157
     { "keys": ["ctrl+t", "ctrl+t"], "command": "toggle_trailing_spaces" },
158
159
     // "d" delete "t" trailing spaces
160
     //{ "keys": ["ctrl+d","ctrl+t"], "command": "delete_trailing_spaces" },
161
162
     163
     // for "Fold comments" package (08/12/2014 12:10)
     165
     // { "keys": ["alt+shift+r"], "command": "toggle_fold_comments" }
166
167
     168
     // don't know how subl handles multiple keybinds, but i can still
169
     // use ctrl+/ to toggle comments, even with the command below
170
     // - note: "ctrl+shift+c" is for "word counts" in default, but i rarely use it
171
     //%-----%
172
     { "keys": ["ctrl+shift+c"], "command": "toggle_comment", "args": { "block": false } | },
173
174
     // "shift+enter" to go to new line without indent (gedit like feel)
175
     // https://www.sublimetext.com/forum/viewtopic.php?f=3&t=2040
176
     { "keys": ["shift+enter"], "command": "run_macro_file", "args": {"file": "Packages/\ser/my_shift_
177
178
179
     // { "keys": ["ctrl+backspace"], "command": "noop"}
180
     // for disabling default hotkey do below
181
     // { "keys": ["ctrl+backspace"], "command": "noop"}
182
```

3.2 Windows setup (subl-win.rst)

Contents

- Symlinks
- Installed Packages
 - xps8900
 - asus
 - asus diff with sbia workstation
- Bunch of random helpful config stuffs
 - Open cygwin shell via right-click in explorer
 - Getting buildsystem to work with cygwin

Important: Also see ../windows.html

3.2.1 Symlinks

Syntax for creating symlinks in Windows (run as admin):

```
mklink SOURCE_FILE TARGET_FILE # for individual files
mklink /d SOURCE_DIR TARGET_DIR # for entire directory
```

Below ran on:

• (2016-09-01) for ASUS

```
:: main setups
mklink "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\Default (Windows) .sublime-keyn
mklink "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\Preferences.sublime-settings"

:: snippet directories
mklink /d "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\sublime-snippets" "C:\Users

:: folderwise sync (currently mostly build-systems)
mklink /d "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\synced_by_folder" "C:\Users

:: individual files
mklink "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\Diff.sublime-settings" "C:\Users
mklink "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\BufferScroll.sublime-settings'

:: macros
mklink "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\my_shift_newLine.sublime-macros
mklink "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\my_shift_newLine.sublime-macros
```

mklink "c:\users\takanori\AppData\Roaming\Sublime Text 3\Packages\User\add_date.py" "c:\Users\takanori

3.2.2 Installed Packages

xps8900

```
.. literalinclude:: Package Control_8900.sublime-settings
:language: json
:linenos:
```

```
"bootstrapped": true,
2
             "in_process_packages":
3
4
            ],
            "installed_packages":
                     "Alignment",
                     "AlignTab",
                     "All Autocomplete",
10
                     "BracketHighlighter",
11
                     "BufferScroll",
12
                     "Diffy",
13
                     "FileDiffs",
14
                     "Fold Comments",
15
                     "Fold Python",
16
                     "Git",
17
                     "GitGutter",
18
                     "InsertDate",
19
                     "Jinja2",
                     "LaTeXing",
21
                     "LaTeXTools",
22
                     "OmniMarkupPreviewer",
23
                     "Origami",
24
                     "Package Control",
25
                     "Pylinter",
26
                     "SideBarEnhancements",
27
                      "SideBarFolders",
28
                      "SideBarGit",
29
                      "Sync View Scroll",
30
                      "TabsExtra",
31
                     "Theme - Soda",
32
                     "TrailingSpaces",
                     "View In Browser"
            ]
35
```

asus

```
.. literalinclude:: Package Control_asus.sublime-settings
   :language: json
   :linenos:
```

```
"bootstrapped": true,
"in_process_packages":

[
],

"installed_packages":

[
"Alignment",
"All Autocomplete",
"BracketHighlighter",
```

```
"BufferScroll",
11
                      "Diffy",
12
                      "FileDiffs",
13
                      "Fold Comments",
14
                      "Git",
15
                      "GitGutter",
16
                      "LaTeX-cwl",
17
                      "LaTeXing",
18
                      "LaTeXTools",
19
                      "Markdown Preview",
20
                      "OmniMarkupPreviewer",
21
                      "Origami",
22
                      "Package Control",
23
                      "SideBarEnhancements",
24
                      "SideBarFolders",
25
                      "SideBarGit",
26
                      "Sync View Scroll",
27
28
                      "TabsExtra",
                      "Theme - Soda",
29
                      "TrailingSpaces"
30
             ]
31
```

asus diff with sbia workstation

```
.. literalinclude:: Package Control_sbia.sublime-settings
    :language: diff
    :linenos:
    :diff: Package Control_asus.sublime-settings
```

```
--- Package Control_asus.sublime-settings
   +++ Package Control_sbia.sublime-settings
2
   @@ -5,28 +5,43 @@
             "installed_packages":
             [
                      "Alignment",
                      "AdvancedNewFile",
                      "All Autocomplete",
                      "Better Completion",
                      "BetterFindBuffer",
11
                      "BracketHighlighter",
12
                      "BufferScroll",
13
                      "Clipboard Manager",
14
                      "ColorPicker",
15
                      "Diffy",
                      "FileDiffs",
17
                      "Fold Comments",
                      "Fold Python",
19
                      "Git",
20
                      "GitGutter",
21
                      "HTML-CSS-JS Prettify",
22
                      "Jinja2",
23
                      "LaTeX-cwl",
                      "LaTeXing",
25
                      "LaTeXTools",
26
                      "Markdown Preview",
27
```

```
"OmniMarkupPreviewer",
28
                      "Origami",
29
                      "Package Control",
                      "PackageResourceViewer",
                      "Pylinter",
32
                      "R-Box",
33
                      "SFTP",
34
                      "SideBarEnhancements",
35
                      "SideBarFolders",
                      "SideBarGit",
                      "Sync View Scroll",
                      "SublimeREPL",
                      "TabsExtra",
40
                      "Terminal",
41
                      "Theme - Soda",
42
                      "TrailingSpaces"
43
                      "Theme - Soda SolarizedDark",
                      "Theme - SoDaReloaded",
45
                      "Tomorrow Color Schemes",
46
                      "TrailingSpaces",
47
                      "View In Browser"
48
             ]
49
```

3.2.3 Bunch of random helpful config stuffs

Open cygwin shell via right-click in explorer

• http://stackoverflow.com/questions/9637601/open-cygwin-at-a-specific-folder

Getting buildsystem to work with cygwin

http://stackoverflow.com/questions/23588260/does-the-sublime-text-2-build-system-accept-input-if-does-not-are-there-any-wor

The "path" below does the trick

```
{
    "path" : "C:/cygwin64/bin/",
    "cmd": ["bash.exe","$file"],
    "file_regex": "^[]*File \"(...*?)\", line ([0-9]*)",
    "word_wrap": false,
    "selector": "source.shell"
}
```

3.3 References (subl-ref.rst)

http://docs.sublimetext.info/en/latest/index.html

3.3.1 Scope info (for snippets and build system)

https://gist.github.com/iambibhas/4705378

3.3.2 Build system info

- http://docs.sublimetext.info/en/latest/file processing/build systems.html
- http://sublimetext.info/docs/en/reference/build_systems.html

3.3.3 When sublime keeps crashing at startup...

Go to /home/takanori/.config/sublime-text-3/Local and delete session files

3.4 Default-settings (subl-defaults.rst)

Contents

• Preferences.sublime-settings (Linux)

3.4.1 Preferences.sublime-settings (Linux)

```
// Place your settings in the file "User/Preferences.sublime-settings", which
2
   // overrides the settings in here.
3
   // Settings may also be placed in file type specific options files, for
   // example, in Packages/Python/Python.sublime-settings for python files.
       // Sets the colors used within the text area
       "color_scheme": "Packages/Color Scheme - Default/Monokai.tmTheme",
       // Note that the font_face and font_size are overridden in the platform
10
       // specific settings file, for example, "Preferences (Linux).sublime-settings".
11
       // Because of this, setting them here will have no effect: you must set them
12
       // in your User File Preferences.
13
       "font_face": "",
       "font_size": 10,
15
16
       // Valid options are "no_bold", "no_italic", "no_antialias", "gray_antialias",
17
       // "subpixel_antialias", "no_round" (OS X only), "gdi" (Windows only) and
18
       // "directwrite" (Windows only)
19
       "font_options": [],
20
21
       // Characters that are considered to separate words
22
       "word_separators": "./\\()\"'-:,.;<>~!@#$%^&*|+=[]{}`~?",
23
24
       // Set to false to prevent line numbers being drawn in the gutter
25
       "line_numbers": true,
26
27
       // Set to false to hide the gutter altogether
28
       "gutter": true,
29
30
       // Spacing between the gutter and the text
31
       "margin": 4,
32
33
       // Fold buttons are the triangles shown in the gutter to fold regions of text
```

```
"fold buttons": true,
35
36
        // Hides the fold buttons unless the mouse is over the gutter
37
        "fade_fold_buttons": true,
38
39
        // Columns in which to display vertical rulers
40
        "rulers": [],
41
42
        // Set to true to turn spell checking on by default
43
       "spell_check": false,
44
45
        // The number of spaces a tab is considered equal to
46
       "tab_size": 4,
47
48
        // Set to true to insert spaces when tab is pressed
49
        "translate_tabs_to_spaces": false,
50
51
52
       // If translate_tabs_to_spaces is true, use_tab_stops will make tab and
        // backspace insert/delete up to the next tabstop
53
        "use_tab_stops": true,
54
55
        // Set to false to disable detection of tabs vs. spaces on load
56
        "detect_indentation": true,
57
58
        // Calculates indentation automatically when pressing enter
59
       "auto_indent": true,
60
61
       // Makes auto indent a little smarter, e.g., by indenting the next line
62
        // after an if statement in C. Requires auto_indent to be enabled.
63
        "smart_indent": true,
65
       // Adds whitespace up to the first open bracket when indenting. Requires
66
        // auto_indent to be enabled.
67
        "indent_to_bracket": false,
68
69
       // Trims white space added by auto_indent when moving the caret off the
70
        // line.
71
       "trim_automatic_white_space": true,
72
73
       // Disables horizontal scrolling if enabled.
74
       // May be set to true, false, or "auto", where it will be disabled for
75
        // source code, and otherwise enabled.
76
        "word_wrap": "auto",
77
78
       // Set to a value other than 0 to force wrapping at that column rather than the
79
        // window width
80
        "wrap_width": 0,
81
82
       // Set to false to prevent word wrapped lines from being indented to the same
83
        // level
84
85
       "indent_subsequent_lines": true,
86
       // Draws text centered in the window rather than left aligned
87
        "draw_centered": false,
88
89
        // Controls auto pairing of quotes, brackets etc
90
91
        "auto_match_enabled": true,
```

```
// Word list to use for spell checking
93
        "dictionary": "Packages/Language - English/en_US.dic",
94
95
        // Sets which scopes are checked for spelling errors
        "spelling_selector": "markup.raw, source string.quoted - punctuation - meta.preprocessor.c.includ
97
98
        // Set to true to draw a border around the visible rectangle on the minimap.
99
        // The color of the border will be determined by the "minimapBorder" key in
100
        // the color scheme
101
        "draw_minimap_border": false,
102
103
        // Always visualise the viewport on the minimap, as opposed to only
104
        // showing it on mouse over
105
        "always_show_minimap_viewport": false,
106
107
        // If enabled, will highlight any line with a caret
108
        "highlight_line": false,
109
110
        // Valid values are "smooth", "phase", "blink" and "solid".
111
        "caret_style": "smooth",
112
113
        // These settings control the size of the caret
114
        "caret_extra_top": 0,
115
        "caret_extra_bottom": 0,
116
        "caret_extra_width": 0,
117
118
        // Set to false to disable underlining the brackets surrounding the caret
119
        "match_brackets": true,
120
121
        // Set to false if you'd rather only highlight the brackets when the caret is
122
123
        // next to one
        "match_brackets_content": true,
124
125
        // Set to false to not highlight square brackets. This only takes effect if
126
        // match_brackets is true
127
        "match_brackets_square": true,
128
129
        // Set to false to not highlight curly brackets. This only takes effect if
130
        // match_brackets is true
131
        "match_brackets_braces": true,
132
133
        // Set to false to not highlight angle brackets. This only takes effect if
134
        // match_brackets is true
135
136
        "match_brackets_angle": false,
137
        // Enable visualization of the matching tag in HTML and XML
138
        "match_tags": true,
139
140
        // Highlights other occurrences of the currently selected text
141
        "match_selection": true,
142
143
        // Additional spacing at the top of each line, in pixels
144
        "line_padding_top": 0,
145
146
147
        // Additional spacing at the bottom of each line, in pixels
        "line_padding_bottom": 0,
148
        // Set to false to disable scrolling past the end of the buffer.
150
```

```
// On OS X, this value is overridden in the platform specific settings, so
151
        // you'll need to place this line in your user settings to override it.
152
        "scroll_past_end": true,
153
154
        // This controls what happens when pressing up or down when on the first
155
        // or last line.
156
        // On OS X, this value is overridden in the platform specific settings, so
157
        // you'll need to place this line in your user settings to override it.
158
        "move_to_limit_on_up_down": false,
159
160
        // Set to "none" to turn off drawing white space, "selection" to draw only the
        // white space within the selection, and "all" to draw all white space
162
        "draw_white_space": "selection",
163
164
        // Set to false to turn off the indentation guides.
165
        // The color and width of the indent guides may be customized by editing
166
        // the corresponding .tmTheme file, and specifying the colors "guide",
167
        // "activeGuide" and "stackGuide"
168
        "draw_indent_guides": true,
169
170
        // Controls how the indent guides are drawn, valid options are
171
        // "draw_normal" and "draw_active". draw_active will draw the indent
172
        // guides containing the caret in a different color.
173
        "indent_guide_options": ["draw_normal"],
174
175
        // Set to true to removing trailing white space on save
176
        "trim_trailing_white_space_on_save": false,
177
178
        // Set to true to ensure the last line of the file ends in a newline
179
        // character when saving
180
        "ensure newline at eof on save": false,
181
182
        // Set to true to automatically save files when switching to a different file
183
        // or application
184
        "save_on_focus_lost": false,
185
186
        // Save via writing to an alternate file, and then renaming it over the
        // original file.
188
        "atomic_save": false,
189
190
        // The encoding to use when the encoding can't be determined automatically.
191
        // ASCII, UTF-8 and UTF-16 encodings will be automatically detected.
192
        "fallback_encoding": "Western (Windows 1252)",
193
194
        // Encoding used when saving new files, and files opened with an undefined
195
        // encoding (e.g., plain ascii files). If a file is opened with a specific
196
        // encoding (either detected or given explicitly), this setting will be
197
        // ignored, and the file will be saved with the encoding it was opened
198
        // with.
199
        "default_encoding": "UTF-8",
        // Files containing null bytes are opened as hexadecimal by default
202
        "enable_hexadecimal_encoding": true,
203
204
        // Determines what character(s) are used to terminate each line in new files.
        // Valid values are 'system' (whatever the OS uses), 'windows' (CRLF) and
        // 'unix' (LF only).
        "default_line_ending": "system",
208
```

```
209
        // When enabled, pressing tab will insert the best matching completion.
210
        // When disabled, tab will only trigger snippets or insert a tab.
211
        // Shift+tab can be used to insert an explicit tab when tab_completion is
        // enabled.
213
        "tab_completion": true,
214
215
        // Enable auto complete to be triggered automatically when typing.
216
        "auto_complete": true,
217
        // The maximum file size where auto complete will be automatically triggered.
219
        "auto_complete_size_limit": 4194304,
220
221
        // The delay, in ms, before the auto complete window is shown after typing
222
        "auto_complete_delay": 50,
223
224
        // Controls what scopes auto complete will be triggered in
        "auto_complete_selector": "source - comment, meta.tag - punctuation.definition.tag.begin",
226
227
        // Additional situations to trigger auto complete
228
        "auto_complete_triggers": [ {"selector": "text.html", "characters": "<"} ],
229
230
        // By default, auto complete will commit the current completion on enter.
        // This setting can be used to make it complete on tab instead.
232
        // Completing on tab is generally a superior option, as it removes
233
        // ambiguity between committing the completion and inserting a newline.
234
        "auto_complete_commit_on_tab": false,
235
236
        // Controls if auto complete is shown when snippet fields are active.
237
        // Only relevant if auto_complete_commit_on_tab is true.
        "auto_complete_with_fields": false,
239
240
        // Controls what happens when pressing the up key while the first item in
241
        // the auto complete window is selected: if false, the window is hidden,
242
        // otherwise the last item in the window is selected. Likewise for the
243
        // down key when the last item is selected.
244
        "auto_complete_cycle": false,
245
246
        // Automatically close HTML and XML tags when </ is entered.
247
        "auto_close_tags": true,
248
249
        // By default, shift+tab will only unindent if the selection spans
250
        // multiple lines. When pressing shift+tab at other times, it'll insert a
251
        // tab character - this allows tabs to be inserted when tab_completion is
252
        // enabled. Set this to true to make shift+tab always unindent, instead of
253
        // inserting tabs.
254
        "shift_tab_unindent": false,
255
256
        // If true, the copy and cut commands will operate on the current line
        // when the selection is empty, rather than doing nothing.
258
        "copy_with_empty_selection": true,
259
260
        // If true, the selected text will be copied into the find panel when it's
261
        // shown.
262
        // On OS X, this value is overridden in the platform specific settings, so
263
        // you'll need to place this line in your user settings to override it.
        "find_selected_text": true,
265
```

```
// When auto_find_in_selection is enabled, the "Find in Selection" flag
267
        // will be enabled automatically when multiple lines of text are selected
268
        "auto_find_in_selection": false,
269
270
        // When drag_text is enabled, clicking on selected text will begin a
271
        // drag-drop operation. This is not currently implemented under Linux.
272
        "drag_text": true,
273
274
275
        // User Interface Settings
276
277
278
        // The theme controls the look of Sublime Text's UI (buttons, tabs, scroll bars, etc)
279
        "theme": "Default.sublime-theme",
280
281
        // Set to 0 to disable smooth scrolling. Set to a value between 0 and 1 to
282
        // scroll slower, or set to larger than 1 to scroll faster
283
        "scroll_speed": 1.0,
284
285
        // Controls side bar animation when expanding or collapsing folders
286
        "tree_animation_enabled": true,
287
288
        // Controls animation throughout the application
289
        "animation_enabled": true,
290
291
        // Makes tabs with modified files more visible
292
        "highlight_modified_tabs": false,
293
294
        "show_tab_close_buttons": true,
295
        // Show folders in the side bar in bold
297
        "bold_folder_labels": false,
298
299
        // OS X only: Set to true to disable Lion style full screen support.
300
        // Sublime Text must be restarted for this to take effect.
301
        "use_simple_full_screen": false,
302
        // OS X only. Valid values are true, false, and "auto". Auto will enable
        // the setting when running on a screen 2560 pixels or wider (i.e., a
305
        // Retina display). When this setting is enabled, OpenGL is used to
306
        // accelerate drawing. Sublime Text must be restarted for changes to take
307
        // effect.
308
        "gpu_window_buffer": "auto",
310
311
        // Valid values are "system", "enabled" and "disabled"
        "overlay_scroll_bars": "system",
312
313
        // Allows tabs to scroll left and right, instead of simply shrinking
314
        "enable_tab_scrolling": true,
315
        // Display file encoding in the status bar
317
        "show_encoding": false,
318
319
        // Display line endings in the status bar
320
        "show_line_endings": false,
321
322
324
        // Application Behavior Settings
```

```
325
326
        // Exiting the application with hot_exit enabled will cause it to close
327
        // immediately without prompting. Unsaved modifications and open files will
328
        // be preserved and restored when next starting.
329
330
        // Closing a window with an associated project will also close the window
331
        // without prompting, preserving unsaved changes in the workspace file
332
        // alongside the project.
333
        "hot_exit": true,
334
335
        // remember_full_screen will allow Sublime Text to start in full screen
336
        // mode if it was exited in full screen mode. When set to false, Sublime
337
        // Text will never start in full screen mode.
338
        "remember_full_screen": false,
339
340
        // Always prompt before reloading a file, even if the file hasn't been
341
342
        // modified. The default behavior is to automatically reload a file if it
        // hasn't been edited. If a file has unsaved changes, a prompt will always
343
        // be shown.
344
        "always_prompt_for_file_reload": false,
345
346
        // OS X only: When files are opened from finder, or by dragging onto the
347
        // dock icon, this controls if a new window is created or not.
348
        "open_files_in_new_window": true,
349
350
        // OS X only: This controls if an empty window is created at startup or not.
351
        "create_window_at_startup": true,
352
353
        // Set to true to close windows as soon as the last file is closed, unless
        // there's a folder open within the window.
355
        // On OS X, this value is overridden in the platform specific settings, so
356
        // you'll need to place this line in your user settings to override it.
357
        "close_windows_when_empty": false,
358
359
        // Show the full path to files in the title bar.
360
        // On OS X, this value is overridden in the platform specific settings, so
        // you'll need to place this line in your user settings to override it.
        "show_full_path": true,
363
364
        // Shows the Build Results panel when building. If set to false, the Build
365
        // Results can be shown via the Tools/Build Results menu.
366
        "show_panel_on_build": true,
367
368
        // Preview file contents when clicking on a file in the side bar. Double
369
        // clicking or editing the preview will open the file and assign it a tab.
370
        "preview_on_click": true,
371
372
        // folder_exclude_patterns and file_exclude_patterns control which files
373
        // are listed in folders on the side bar. These can also be set on a per-
374
375
        // project basis.
        "folder_exclude_patterns": [".svn", ".git", ".hg", "CVS"],
376
        "file_exclude_patterns": ["*.pyc", "*.pyo", "*.exe", "*.dll", "*.obj", "*.o", "*.a", |"*.lib", "*.s
377
        // These files will still show up in the side bar, but won't be included in
378
        // Goto Anything or Find in Files
379
        "binary_file_patterns": ["*.jpg", "*.jpeg", "*.png", "*.gif", "*.ttf", "*.tga", "*.dds", "*.ico",
        // File indexing parses all files in the side bar, and builds an index of
382
```

```
// their symbols. This is required for Goto Definition to work.
383
        "index_files": true,
384
385
        // Set the number threads to use for indexing. A value of 0 will make
        // Sublime Text guess based on the number of cores. Use the index_files
        // setting to disable all workers.
388
        "index_workers": 0,
389
390
        // index_exclude_patterns indicate which files won't be indexed.
391
        "index_exclude_patterns": ["*.log"],
392
        // When enabled, anonymised usage data is sent back, assisting Sublime HQ
        // in making informed decisions about improving Sublime Text. File names
395
        // and file contents are never included, but data such as computer
396
        // specifications, startup time, installed packages, and edited file types
397
        // are. When disabled, telemetry is neither recorded or sent.
        // A setting of auto will enable telemetry in dev builds, and disable
        // telemetry in regular builds.
        "enable_telemetry": "auto",
401
402
        // List any packages to ignore here. When removing entries from this list,
403
        // a restart may be required if the package contains plugins.
404
        "ignored_packages": ["Vintage"]
405
```

CHAPTER

FOUR

R (R.RST)

ln -s ~/Dropbox/git/configs/source/R/r.snippets ~/.R/snippets/r.snippets

CHAPTER

FIVE

WINDOWS MACHINE SETUP (WINDOWS.RST)

Files related to my windows machine setup.

5.1 Autohotkey (win-ahk.rst)

Contents

- Main references
- Notes
 - Details on SentInput
 - Variables in AHK
 - Looping in AHK
 - other useful references

5.1.1 Main references

The main "cheat-sheet" to look at for help:

• http://ahkscript.org/docs/commands/index.htm

The symbols for the modifier keys (for a full list: http://ahkscript.org/docs/Hotkeys.htm#Symbols)

```
#: windows key
^: control key
!: alt key
+: shift key
```

This link contains a good list of examples

• http://www.computerhope.com/tips/tip209.htm

5.1.2 Notes

Details on SentInput

- http://ahkscript.org/docs/commands/Send.htm#SendInputDetail
- In short, "SendInput is generally the preferred method to send keystrokes and mouse clicks because of its superior speed and reliability"

Variables in AHK

http://ahkscript.org/docs/Variables.htm

- Variable names are not case sensitive
- list of built-in variables: [link]
- Operations on variables [link]
- To have more than one command executed by a hotkey, put the first line beneath the hotkey definition and make the last line return.

Looping in AHK

http://ahkscript.org/docs/commands/Loop.htm

other useful references

- http://www.autohotkey.com/docs/
- http://www.autohotkey.com/docs/Hotkeys.htm
- http://www.autohotkey.com/docs/KeyList.htm
- http://www.autohotkey.com/docs/commands.htm
- http://www.autohotkey.com/docs/commands/FileAppend.htm]
- http://www.autohotkey.com/board/topic/25393-appskeys-a-suite-of-simple-utility-hotkeys/
- http://xahlee.info/mswin/autohotkey_key_notations.html

5.2 MS Office Setups (win-office.rst)

Contents

- · Word macro
- One-note

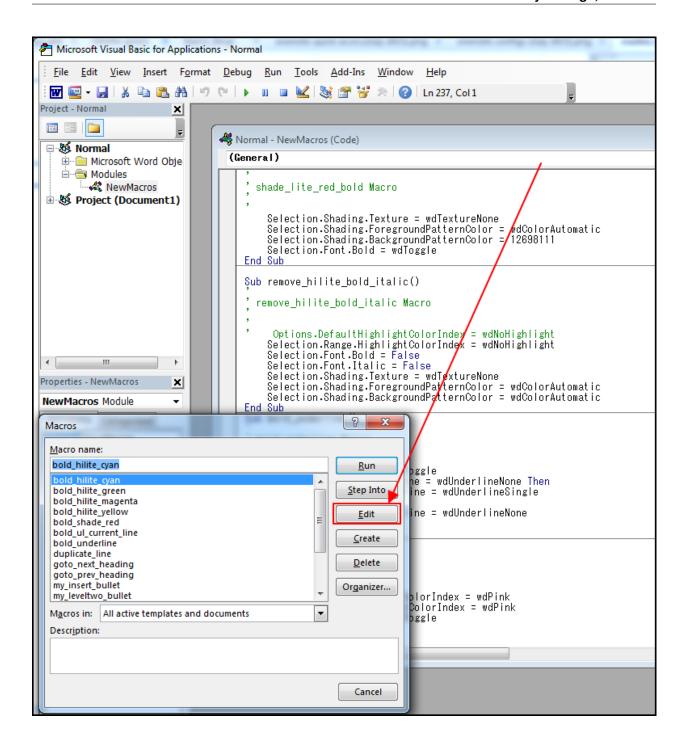
For souce files, see https://github.com/wtak23/configs/tree/master/source/windows/office-setup

Important: Imported from my old configs repos on (2016-09-01)

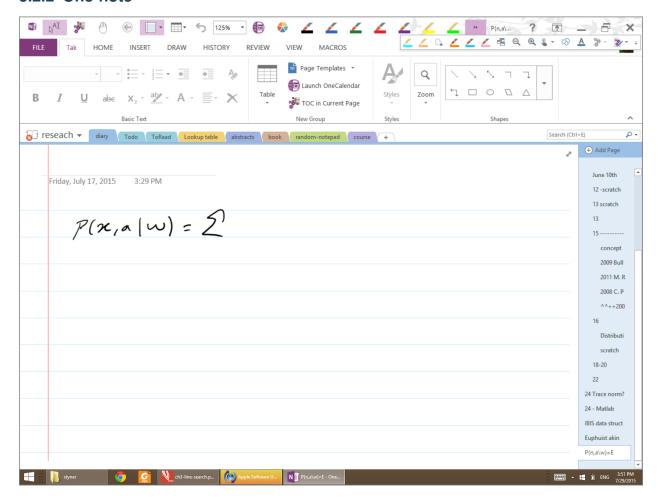
Macro and keyboard shortcut info saved in Normal . dotm file (2016-06-18)

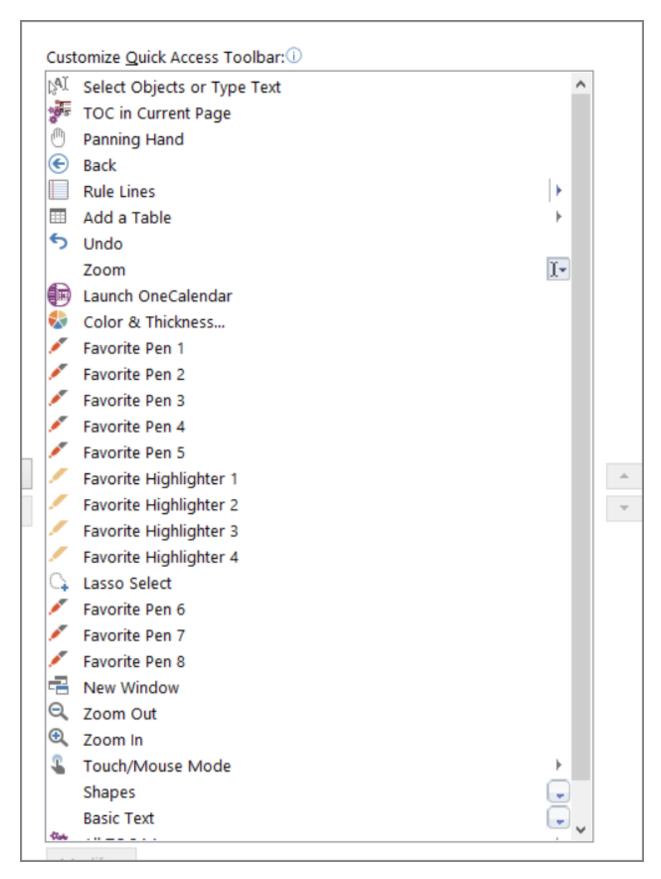
5.2.1 Word macro

macro_bkup just a copy and paste from macro-editor



5.2.2 One-note





5.3 XPS8900 Desktop settings (win-xps8900.rst)

Contents

- Startup Files
- symlinks
 - cygwin configs
 - Sublime text
 - Office

5.3.1 Startup Files

```
C:\Users\takanori\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup

Xming.lnk
WinSplit.exe.lnk
myHotStrings.ahk.lnk
myHotKeys-asus.ahk - Shortcut.lnk
Dropbox.lnk
```

5.3.2 symlinks

Run as admin on cmd

cygwin configs

See instructions in bash-cygwin-symlink setup

Sublime text

See instructions in *sublime-symlink setup*

Office

mklink "C:\Users\takanori\AppData\Roaming\Microsoft\Templates\Normal.dotm" "C:\Users\takanori\Dropbo:

5.4 ASUS laptop settings (win-asus.rst)

Contents

94

- Startup Files
- symlinks
 - cygwin configs
 - Sublime text
 - Office

5.4.1 Startup Files

```
C:\Users\takanori\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup

Xming.lnk
WinSplit.exe.lnk
remapKeysLaptop-asus.ahk - Shortcut.lnk
myHotStrings.ahk.lnk
myHotKeys-asus.ahk - Shortcut.lnk
Dropbox.lnk
```

5.4.2 symlinks

Run as admin on cmd

cygwin configs

See instructions in bash-cygwin-symlink setup

Sublime text

See instructions in *sublime-symlink setup*

Office

mklink "C:\Users\takanori\AppData\Roaming\Microsoft\Templates\Normal.dotm" "C:\Users\takanori\Dropbo

5.5 (Old) Thing to do on a new computer (win-old-notes.rst)

Important: Brought this from my old repos.

https://github.com/wtak23/configs_master/blob/master/cygwin/windows-setup.rst

Contents

- Softwares to install
 - The "Essentials"
 - Computational
 - Non-essentials
- Short-cuts to add in "Startup" folder
 - xming
- misc
 - Username change
 - Location of Normal.dotm

5.5.1 Softwares to install

https://ninite.com/ <= comes in handy

- Chrome, Firefox, Skype,
- JDK 8, Java 8
- WinSCP, Putty
- Dropbox, itunes, k-lite codecs
- Classic Start (for Windows 8)
- · AdobeReader, SumatraPDF, PDFCreator

The "Essentials"

- · cygwin
- Sublime Text3: sublimetext.com/3
- MikTex (choose 64 bit)
- Foxitreader
- VNC for windows (exectuable in dropbox....mapped hotkey WIN+V to call)
- Office 365
- PicPick: http://www.picpick.org/en/
- QtTabbar (installer on my computer)
- PdfFill link
- xming
- · Autohotkey http://www.autohotkey.com/

IDE's - Enthrough Canopy (I like their "out-of-the-box" ipython, which i invoke from Console2) - IntelliJ IDEA - JetBrains - Visual Studio Pro (from Dreamspark)

Computational

- · Anaconda Python
- Rstudio
- Padre: http://padre.perlide.org/

Non-essentials

- PDFill
- Itunes
- Logitech Unifying
- Logitech SetPoint (not installed on my laptops...messes up my ahk scripts)

5.5.2 Short-cuts to add in "Startup" folder

- console2
- WinSplit
- · Autohotkey scripts

xming

- Target: "C:Program Files (x86)XmingXming.exe": 0 -clipboard -multiwindow -dpi 108
- Start in: "C:Program Files (x86)Xming"

5.5.3 misc

- Verify java here: http://java.com/en/download/installed.jsp
- Nice helper: http://www.saltycrane.com/blog/2007/11/cygwin-install-tips/ (download subversion and wget on initial cygwin install; see here)
- apt-cyg install may give you md5sum error...replace md5sum with sha512sum in 2 lines of code in /usr/bin/apt-cyg (ref1, ref2)

Username change

 $http://answers.microsoft.com/en-us/windows/forum/windows_8-files/windows-8-user-folder-rename/3364a356-bf93-4e5c-8fcb-67850e837d6b?page=2$

Location of Normal.dotm

C:\Users\takanori\AppData\Roaming\Microsoft\Templates

TROUBLE-SHOOTING NOTES (TROUBLE-SHOOTING.RST)

Jumbled notes on trouble-shooting when computer goes through unexpected hiccups.

Note: rst file-names prepended with **ts** (makes it easy to navigate in sublime-text)

Danger: Whenever I'll make notes here, there's a high chance that I'll not be in my finest mood (debugging unexpected computer hiccups is not my favorite activity):(

6.1 ts-bash (ts-bash.rst)

Contents

- Old-notes from old config_master repos
 - Color in less
 - Latex installer 06-15-2016 (21:48)

6.1.1 Old-notes from old config_master repos

Note: imported this from my old config notes. content may be obsolete 09-01-2016 (16:23)

Color in less

```
# on my sbia computer
ln -s ~/Dropbox/git/configs_master/sbia-pc125-cinn/.lessfilter ~/.lessfilter
```

Content of .lessfilter

```
#!/bin/sh

# # !/bin/sh

# # to colorize ``less`` command

# 06-15-2016 (18:54)

# # thtp://superuser.com/questions/117841/get-colors-in-less-command
```

```
# http://pygments.org/docs/cmdline/
   # (note: i had to manually change color in the terminal so that text looks good;
   # (eg: dark text on black bg looks horrendous)
10
11
   case "$1" in
12
       *.awk|*.groff|*.java|*.js|*.m4|*.php|*.pl|*.pm|*.pod|*.sh|
13
       *.ad[asb]|*.asm|*.inc|*.[ch]|*.[ch]pp|*.[ch]xx|*.cc|*.hh|
14
       *.lsp|*.l|*.pas|*.p|*.xml|*.xps|*.xsl|*.axp|*.ppd|*.pov|
15
       *.diff|*.patch|*.py|*.rb|*.sql|*.ebuild|*.eclass)
           pygmentize "$1";;
17
       .bashrc|.bash_aliases|.bash_environment)
18
           pygmentize -l sh "$1"
19
           ;;
20
21
           grep "#\!/bin/bash" "$1" > /dev/null
22
           if [ "$?" -eq "0" ]; then
23
               pygmentize -l sh "$1"
24
25
           else
               exit 1
26
           fi
27
   esac
28
29
   exit 0
```

Reference

- for cygwin (haven't tried yet)
 - http://unix.stackexchange.com/questions/19317/can-less-retain-colored-output
- for grep: http://superuser.com/questions/36022/less-and-grep-getting-colored-results-when-using-a-pipe-from-grep-to-less?rq=1

Latex installer 06-15-2016 (21:48)

I had to do this to get make latex to work on Sphinx

http://tex.stackexchange.com/questions/39771/finding-a-ubuntu-package-for-a-sty-file

```
sudo apt-get install texlive-latex-extra

# to solve error kpathsea: Running mktexmf ecrm1000 ! I can't find file `ecrm1000'.
#http://tex.stackexchange.com/questions/116332/latex-compilation-of-simple-document-fails
sudo apt-get install texlive-fonts-recommended
```

6.2 ts-sublime (ts-sublime.rst)

Contents

- Old-notes from old config_master repos
 - How to remove startup session
 - omni-markup error
 - get images from goto

6.2.1 Old-notes from old config master repos

Note: imported this from my old config notes. content may be obsolete 09-01-2016 (16:23)

How to remove startup session

in case Sublime-text freezes up at startup (keeps happening...err...)

```
rm /home/takanori/.config/sublime-text-3/Local/Session.sublime_session
```

omni-markup error

https://github.com/timonwong/OmniMarkupPreviewer/issues/82

```
"server_host": "0.0.0.0",
"server_port": 9998,
```

get images from goto

http://stackoverflow.com/questions/24834338/finding-images-in-go-to-anything

Changed this in .sublime-settings file:

```
// These files will still show up in the side bar, but won't be included in
// Goto Anything or Find in Files
"binary_file_patterns": ["*.jpg", "*.jpeg", "*.png", "*.gif", "*.ttf", "*.tga", "*.dds", "*.ico", "*
```

6.3 ts-python (ts-python.rst)

Contents

· Getting theano to work on Windows

6.3.1 Getting theano to work on Windows

https://www.kaggle.com/c/otto-group-product-classification-challenge/forums/t/13973/a-few-tips-to-install-theano-on-windows-64-bits

CHAPTER

SEVEN

MISCELLANEOUS (MISC.RST)

Other stuffs/notes pertaining to my computer setup.

7.1 cuda-installation (old) (misc-cuda-old.rst)

Installing CUDA on my SBIA workstation

Contents

- Installing Theano
- Installing cuda
 - references
- Pre september
- cuda install output

Important: Brought this from my old configs repos. This was lasted updated June 10, 2016. Not sure if I still need this, but kept for my own reference.

7.1.1 Installing Theano

http://deeplearning.net/software/theano/install_ubuntu.html#install-ubuntu

7.1.2 Installing cuda

references

- http://www.r-tutor.com/gpu-computing/cuda-installation/cuda7.5-ubuntu
- http://askubuntu.com/questions/451672/installing-and-testing-cuda-in-ubuntu-14-04
- Linux Mint 17 is based on Ubuntu 14.04 (source)
- lsb_release -a

Download cuda .deb here (Get x86_64 Ubun14.04 deb local)

Then follow the 3 step procedure

1. sudo dpkg -i cuda-repo-ubuntu1404-7-5-local_7.5-18_amd64.deb

```
    sudo apt-get update
    sudo apt-get install cuda
```

7.1.3 Pre september

```
glxinfo
   sudo apt-get install nvclock
  nvclock -c
   lshw
   lspci
   sudo apt-get install liblapack-dev
   sudo apt-get install gfortran libopenblas-dev liblapack-dev # http://stackoverflow.com/questions/749
   sudo apt-get install gfortran libblas-dev liblapack-dev
10
   sudo apt-get install python-dev
11
   sudo apt-get install libatlas-base-dev
13
14
   sudo pip install --upgrade theano
15
16
17
   # to get nvcc
18
   sudo apt-get install nvidia-cuda-toolkit
```

7.1.4 cuda install output

```
De-configuring libdrm-radeon1:i386 (2.4.52-1) ...
Unpacking libdrm-radeon1:amd64 (2.4.60-2~ubuntu14.04.1) over (2.4.52-1) ...
Preparing to unpack .../libdrm-radeon1_2.4.60-2~ubuntu14.04.1_i386.deb ...
Unpacking libdrm-radeon1:i386 (2.4.60-2~ubuntu14.04.1) over (2.4.52-1) ...
Preparing to unpack .../libgles2-mesa_10.1.3-Oubuntu0.4_amd64.deb ...
Unpacking libgles2-mesa:amd64 (10.1.3-Oubuntu0.4) over (10.1.3-Oubuntu0.1) ...
Preparing to unpack .../libgl1-mesa-glx_10.1.3-0ubuntu0.4_amd64.deb ...
De-configuring libgl1-mesa-glx:i386 (10.1.3-Oubuntu0.1) ...
Unpacking libgl1-mesa-glx:amd64 (10.1.3-0ubuntu0.4) over (10.1.3-0ubuntu0.1) ...
Preparing to unpack .../libgl1-mesa-glx 10.1.3-0ubuntu0.4 i386.deb ...
Unpacking libgl1-mesa-glx:i386 (10.1.3-0ubuntu0.4) over (10.1.3-0ubuntu0.1) ...
Preparing to unpack .../libglapi-mesa_10.1.3-0ubuntu0.4_i386.deb ...
De-configuring libglapi-mesa:amd64 (10.1.3-0ubuntu0.1) ...
Unpacking libglapi-mesa:i386 (10.1.3-0ubuntu0.4) over (10.1.3-0ubuntu0.1) ...
Preparing to unpack .../libglapi-mesa_10.1.3-0ubuntu0.4_amd64.deb ...
Unpacking libglapi-mesa:amd64 (10.1.3-0ubuntu0.4) over (10.1.3-0ubuntu0.1) ...
Selecting previously unselected package freeglut3:amd64.
Preparing to unpack .../freeglut3_2.8.1-1_amd64.deb ...
Unpacking freeglut3:amd64 (2.8.1-1) ...
Preparing to unpack .../libdrm-intel1_2.4.60-2~ubuntu14.04.1_i386.deb ...
De-configuring libdrm-intell:amd64 (2.4.52-1) ...
Unpacking libdrm-intel1:i386 (2.4.60-2~ubuntu14.04.1) over (2.4.52-1) ...
Preparing to unpack .../libdrm-intel1_2.4.60-2~ubuntu14.04.1_amd64.deb ...
Unpacking libdrm-intel1:amd64 (2.4.60-2~ubuntu14.04.1) over (2.4.52-1) ...
Selecting previously unselected package libjansson4:amd64.
Preparing to unpack .../libjansson4_2.5-2_amd64.deb ...
Unpacking libjansson4:amd64 (2.5-2) ...
Preparing to unpack .../libdpkg-perl_1.17.5ubuntu5.4_all.deb ...
```

```
Unpacking libdpkg-perl (1.17.5ubuntu5.4) over (1.17.5ubuntu5.3) ...
Selecting previously unselected package dpkg-dev.
Preparing to unpack .../dpkg-dev_1.17.5ubuntu5.4_all.deb ...
Unpacking dpkg-dev (1.17.5ubuntu5.4) ...
Selecting previously unselected package build-essential.
Preparing to unpack .../build-essential_11.6ubuntu6_amd64.deb ...
Unpacking build-essential (11.6ubuntu6) ...
Selecting previously unselected package cuda-license-7-5.
Preparing to unpack .../cuda-license-7-5_7.5-18_amd64.deb ...
Unpacking cuda-license-7-5 (7.5-18) ...
Selecting previously unselected package cuda-misc-headers-7-5.
Preparing to unpack .../cuda-misc-headers-7-5_7.5-18_amd64.deb ...
Unpacking cuda-misc-headers-7-5 (7.5-18) ...
Selecting previously unselected package cuda-core-7-5.
Preparing to unpack .../cuda-core-7-5_7.5-18_amd64.deb ...
Unpacking cuda-core-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cudart-7-5.
Preparing to unpack .../cuda-cudart-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cudart-7-5 (7.5-18) ...
Selecting previously unselected package cuda-driver-dev-7-5.
Preparing to unpack .../cuda-driver-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-driver-dev-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cudart-dev-7-5.
Preparing to unpack .../cuda-cudart-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cudart-dev-7-5 (7.5-18) ...
Selecting previously unselected package cuda-command-line-tools-7-5.
Preparing to unpack .../cuda-command-line-tools-7-5_7.5-18_amd64.deb ...
Unpacking cuda-command-line-tools-7-5 (7.5-18) ...
Selecting previously unselected package cuda-nvrtc-7-5.
Preparing to unpack .../cuda-nvrtc-7-5_7.5-18_amd64.deb ...
Unpacking cuda-nvrtc-7-5 (7.5-18) ...
Selecting previously unselected package cuda-nvrtc-dev-7-5.
Preparing to unpack .../cuda-nvrtc-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-nvrtc-dev-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cusolver-7-5.
Preparing to unpack .../cuda-cusolver-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cusolver-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cusolver-dev-7-5.
Preparing to unpack .../cuda-cusolver-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cusolver-dev-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cublas-7-5.
Preparing to unpack .../cuda-cublas-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cublas-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cublas-dev-7-5.
Preparing to unpack .../cuda-cublas-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cublas-dev-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cufft-7-5.
Preparing to unpack .../cuda-cufft-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cufft-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cufft-dev-7-5.
Preparing to unpack .../cuda-cufft-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cufft-dev-7-5 (7.5-18) ...
Selecting previously unselected package cuda-curand-7-5.
Preparing to unpack .../cuda-curand-7-5_7.5-18_amd64.deb ...
Unpacking cuda-curand-7-5 (7.5-18) ...
Selecting previously unselected package cuda-curand-dev-7-5.
Preparing to unpack .../cuda-curand-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-curand-dev-7-5 (7.5-18) ...
```

```
Selecting previously unselected package cuda-cusparse-7-5.
Preparing to unpack .../cuda-cusparse-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cusparse-7-5 (7.5-18) ...
Selecting previously unselected package cuda-cusparse-dev-7-5.
Preparing to unpack .../cuda-cusparse-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-cusparse-dev-7-5 (7.5-18) ...
Selecting previously unselected package cuda-npp-7-5.
Preparing to unpack .../cuda-npp-7-5_7.5-18_amd64.deb ...
Unpacking cuda-npp-7-5 (7.5-18) ...
Selecting previously unselected package cuda-npp-dev-7-5.
Preparing to unpack .../cuda-npp-dev-7-5_7.5-18_amd64.deb ...
Unpacking cuda-npp-dev-7-5 (7.5-18) ...
Selecting previously unselected package xorg-sgml-doctools.
Preparing to unpack .../xorg-sgml-doctools_1%3a1.11-1_all.deb ...
Unpacking xorg-sgml-doctools (1:1.11-1) ...
Selecting previously unselected package x11proto-core-dev.
Preparing to unpack .../x11proto-core-dev_7.0.26-1~ubuntu2_all.deb ...
Unpacking x11proto-core-dev (7.0.26-1~ubuntu2) ...
Selecting previously unselected package libxau-dev:amd64.
Preparing to unpack .../libxau-dev_1%3a1.0.8-1_amd64.deb ...
Unpacking libxau-dev:amd64 (1:1.0.8-1) ...
Selecting previously unselected package libxdmcp-dev:amd64.
Preparing to unpack .../libxdmcp-dev_1%3a1.1.1-1_amd64.deb ...
Unpacking libxdmcp-dev:amd64 (1:1.1.1-1) ...
Selecting previously unselected package x11proto-input-dev.
Preparing to unpack .../x11proto-input-dev_2.3-1_all.deb ...
Unpacking x11proto-input-dev (2.3-1) ...
Selecting previously unselected package x11proto-kb-dev.
Preparing to unpack .../x11proto-kb-dev_1.0.6-2_all.deb ...
Unpacking x11proto-kb-dev (1.0.6-2) ...
Selecting previously unselected package xtrans-dev.
Preparing to unpack .../xtrans-dev_1.3.5-1~ubuntu14.04.1_all.deb ...
Unpacking xtrans-dev (1.3.5-1~ubuntu14.04.1) ...
Selecting previously unselected package libpthread-stubs0-dev:amd64.
Preparing to unpack .../libpthread-stubs0-dev_0.3-4_amd64.deb ...
Unpacking libpthread-stubs0-dev:amd64 (0.3-4) ...
Selecting previously unselected package libxcb1-dev:amd64.
Preparing to unpack .../libxcb1-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb1-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libx11-dev:amd64.
Preparing to unpack .../libx11-dev_2%3a1.6.2-1ubuntu2_amd64.deb ...
Unpacking libx11-dev:amd64 (2:1.6.2-lubuntu2) ...
Selecting previously unselected package libdrm-dev:amd64.
Preparing to unpack .../libdrm-dev_2.4.60-2~ubuntu14.04.1_amd64.deb ...
Unpacking libdrm-dev:amd64 (2.4.60-2~ubuntu14.04.1) ...
Selecting previously unselected package mesa-common-dev.
Preparing to unpack .../mesa-common-dev_10.1.3-0ubuntu0.4_amd64.deb ...
Unpacking mesa-common-dev (10.1.3-0ubuntu0.4) ...
Selecting previously unselected package libx11-xcb-dev:amd64.
Preparing to unpack .../libx11-xcb-dev_2%3a1.6.2-1ubuntu2_amd64.deb ...
Unpacking libx11-xcb-dev:amd64 (2:1.6.2-1ubuntu2) ...
Selecting previously unselected package libxcb-dri3-dev:amd64.
Preparing to unpack .../libxcb-dri3-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-dri3-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libxcb-render0-dev:amd64.
Preparing to unpack .../libxcb-render0-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-render0-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libxcb-randr0-dev:amd64.
```

```
Preparing to unpack .../libxcb-randr0-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-randr0-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libxcb-shape0-dev:amd64.
Preparing to unpack .../libxcb-shape0-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-shape0-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libxcb-xfixes0-dev:amd64.
Preparing to unpack .../libxcb-xfixes0-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-xfixes0-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libxcb-sync-dev:amd64.
Preparing to unpack .../libxcb-sync-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-sync-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libxcb-present-dev:amd64.
Preparing to unpack .../libxcb-present-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-present-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libxshmfence-dev:amd64.
Preparing to unpack .../libxshmfence-dev_1.1-2_amd64.deb ...
Unpacking libxshmfence-dev:amd64 (1.1-2) ...
Selecting previously unselected package libxcb-dri2-0-dev:amd64.
Preparing to unpack .../libxcb-dri2-0-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-dri2-0-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package libxcb-qlx0-dev:amd64.
Preparing to unpack .../libxcb-glx0-dev_1.10-2ubuntu1_amd64.deb ...
Unpacking libxcb-glx0-dev:amd64 (1.10-2ubuntu1) ...
Selecting previously unselected package x11proto-xext-dev.
Preparing to unpack .../x11proto-xext-dev_7.3.0-1_all.deb ...
Unpacking x11proto-xext-dev (7.3.0-1) ...
Selecting previously unselected package x11proto-fixes-dev.
Preparing to unpack .../x11proto-fixes-dev_1%3a5.0-2ubuntu2_all.deb ...
Unpacking x11proto-fixes-dev (1:5.0-2ubuntu2) ...
Selecting previously unselected package libxfixes-dev:amd64.
Preparing to unpack .../libxfixes-dev_1%3a5.0.1-1ubuntu1.1_amd64.deb ...
Unpacking libxfixes-dev:amd64 (1:5.0.1-lubuntu1.1) ...
Selecting previously unselected package x11proto-damage-dev.
Preparing to unpack .../x11proto-damage-dev_1%3a1.2.1-2_all.deb ...
Unpacking x11proto-damage-dev (1:1.2.1-2) ...
Selecting previously unselected package libxdamage-dev:amd64.
Preparing to unpack .../libxdamage-dev_1%3a1.1.4-lubuntu1_amd64.deb ...
Unpacking libxdamage-dev:amd64 (1:1.1.4-1ubuntu1) ...
Selecting previously unselected package libxext-dev:amd64.
Preparing to unpack .../libxext-dev_2%3a1.3.2-1ubuntu0.0.14.04.1_amd64.deb ...
Unpacking libxext-dev:amd64 (2:1.3.2-1ubuntu0.0.14.04.1) ...
Selecting previously unselected package x11proto-xf86vidmode-dev.
Preparing to unpack .../x11proto-xf86vidmode-dev_2.3.1-2_all.deb ...
Unpacking x11proto-xf86vidmode-dev (2.3.1-2) ...
Selecting previously unselected package libxxf86vm-dev:amd64.
Preparing to unpack .../libxxf86vm-dev_1%3a1.1.3-1_amd64.deb ...
Unpacking libxxf86vm-dev:amd64 (1:1.1.3-1) ...
Selecting previously unselected package x11proto-dri2-dev.
Preparing to unpack .../x11proto-dri2-dev_2.8-2_all.deb ...
Unpacking x11proto-dri2-dev (2.8-2) ...
Selecting previously unselected package x11proto-gl-dev.
Preparing to unpack .../x11proto-gl-dev_1.4.17-1_all.deb ...
Unpacking x11proto-gl-dev (1.4.17-1) ...
Selecting previously unselected package libgl1-mesa-dev.
Preparing to unpack .../libgl1-mesa-dev_10.1.3-0ubuntu0.4_amd64.deb ...
Unpacking libgl1-mesa-dev (10.1.3-0ubuntu0.4) ...
Selecting previously unselected package libglu1-mesa-dev.
Preparing to unpack .../libglu1-mesa-dev_9.0.0-2_amd64.deb ...
```

```
Unpacking libglu1-mesa-dev (9.0.0-2) ...
Selecting previously unselected package libice-dev:amd64.
Preparing to unpack .../libice-dev_2%3a1.0.8-2_amd64.deb ...
Unpacking libice-dev:amd64 (2:1.0.8-2) ...
Selecting previously unselected package libsm-dev:amd64.
Preparing to unpack .../libsm-dev_2%3a1.2.1-2_amd64.deb ...
Unpacking libsm-dev:amd64 (2:1.2.1-2) ...
Selecting previously unselected package libxt-dev:amd64.
Preparing to unpack .../libxt-dev_1%3a1.1.4-1_amd64.deb ...
Unpacking libxt-dev:amd64 (1:1.1.4-1) ...
Selecting previously unselected package freeglut3-dev:amd64.
Preparing to unpack .../freeglut3-dev_2.8.1-1_amd64.deb ...
Unpacking freeglut3-dev:amd64 (2.8.1-1) ...
Selecting previously unselected package libxmu-headers.
Preparing to unpack .../libxmu-headers_2%3a1.1.1-1_all.deb ...
Unpacking libxmu-headers (2:1.1.1-1) ...
Selecting previously unselected package libxmu-dev:amd64.
Preparing to unpack .../libxmu-dev_2%3a1.1.1-1_amd64.deb ...
Unpacking libxmu-dev:amd64 (2:1.1.1-1) ...
Selecting previously unselected package libxi-dev.
Preparing to unpack .../libxi-dev_2%3a1.7.1.901-1ubuntu1.1_amd64.deb ...
Unpacking libxi-dev (2:1.7.1.901-1ubuntu1.1) ...
Selecting previously unselected package cuda-samples-7-5.
Preparing to unpack .../cuda-samples-7-5_7.5-18_amd64.deb ...
Unpacking cuda-samples-7-5 (7.5-18) ...
Selecting previously unselected package cuda-documentation-7-5.
Preparing to unpack .../cuda-documentation-7-5_7.5-18_amd64.deb ...
Unpacking cuda-documentation-7-5 (7.5-18) ...
Selecting previously unselected package cuda-visual-tools-7-5.
Preparing to unpack .../cuda-visual-tools-7-5_7.5-18_amd64.deb ...
Unpacking cuda-visual-tools-7-5 (7.5-18) ...
Selecting previously unselected package cuda-toolkit-7-5.
Preparing to unpack .../cuda-toolkit-7-5_7.5-18_amd64.deb ...
Unpacking cuda-toolkit-7-5 (7.5-18) ...
Selecting previously unselected package nvidia-352.
Preparing to unpack .../nvidia-352_352.39-0ubuntu1_amd64.deb ...
Unpacking nvidia-352 (352.39-Oubuntul) ...
Selecting previously unselected package nvidia-352-uvm.
Preparing to unpack .../nvidia-352-uvm_352.39-0ubuntu1_amd64.deb ...
Unpacking nvidia-352-uvm (352.39-0ubuntu1) ...
Selecting previously unselected package nvidia-352-dev.
Preparing to unpack .../nvidia-352-dev_352.39-0ubuntu1_amd64.deb ...
Unpacking nvidia-352-dev (352.39-0ubuntu1) ...
Selecting previously unselected package nvidia-modprobe.
Preparing to unpack .../nvidia-modprobe_352.39-0ubuntu1_amd64.deb ...
Unpacking nvidia-modprobe (352.39-Oubuntul) ...
Selecting previously unselected package libxnvctrl0.
Preparing to unpack .../libxnvctrl0_352.39-Oubuntu1_amd64.deb ...
Unpacking libxnvctrl0 (352.39-Oubuntu1) ...
Preparing to unpack .../nvidia-settings_352.39-0ubuntu1_amd64.deb ...
Unpacking nvidia-settings (352.39-Oubuntul) over (331.20-Oubuntu8) ...
Selecting previously unselected package nvidia-opencl-icd-352.
Preparing to unpack .../nvidia-opencl-icd-352_352.39-0ubuntu1_amd64.deb ...
Unpacking nvidia-opencl-icd-352 (352.39-Oubuntul) ...
Selecting previously unselected package cuda-drivers.
Preparing to unpack .../cuda-drivers_352.39-1_amd64.deb ...
Unpacking cuda-drivers (352.39-1) ...
Selecting previously unselected package cuda-runtime-7-5.
```

```
Preparing to unpack .../cuda-runtime-7-5_7.5-18_amd64.deb ...
Unpacking cuda-runtime-7-5 (7.5-18) ...
Selecting previously unselected package cuda-7-5.
Preparing to unpack ..././cuda-7-5_7.5-18_amd64.deb ...
Unpacking cuda-7-5 (7.5-18) ...
Selecting previously unselected package cuda.
Preparing to unpack ..././cuda_7.5-18_amd64.deb ...
Unpacking cuda (7.5-18) ...
Processing triggers for man-db (2.6.7.1-1ubuntu1) ...
Processing triggers for ureadahead (0.100.0-16) ...
ureadahead will be reprofiled on next reboot
Processing triggers for gnome-menus (3.10.1-0ubuntu2) ...
Processing triggers for desktop-file-utils (0.22-lubuntu1) ...
Processing triggers for mime-support (3.54ubuntul) ...
Setting up libcuda1-352 (352.39-Oubuntu1) ...
Setting up libxext6:i386 (2:1.3.2-1ubuntu0.0.14.04.1) ...
Setting up libxext6:amd64 (2:1.3.2-1ubuntu0.0.14.04.1) ...
Setting up libxfixes3:i386 (1:5.0.1-1ubuntu1.1) ...
Setting up libxfixes3:amd64 (1:5.0.1-lubuntu1.1) ...
Setting up libxi6:i386 (2:1.7.1.901-1ubuntu1.1) ...
Setting up libxi6:amd64 (2:1.7.1.901-lubuntu1.1) ...
Setting up libdrm2:amd64 (2.4.60-2~ubuntu14.04.1) ...
Setting up libdrm2:i386 (2.4.60-2~ubuntu14.04.1) ...
Setting up libdrm-nouveau2:amd64 (2.4.60-2~ubuntu14.04.1) ...
Setting up libdrm-nouveau2:i386 (2.4.60-2~ubuntu14.04.1) ...
Setting up libdrm-radeon1:amd64 (2.4.60-2~ubuntu14.04.1) ...
Setting up libdrm-radeon1:i386 (2.4.60-2~ubuntu14.04.1) ...
Setting up libegl1-mesa:amd64 (10.1.3-Oubuntu0.4) ...
Setting up libglapi-mesa:amd64 (10.1.3-0ubuntu0.4) ...
Setting up libglapi-mesa:i386 (10.1.3-Oubuntu0.4) ...
Setting up libwayland-egl1-mesa:amd64 (10.1.3-0ubuntu0.4) ...
Setting up libegl1-mesa-drivers:amd64 (10.1.3-0ubuntu0.4) ...
Setting up libgles2-mesa:amd64 (10.1.3-Oubuntu0.4) ...
Setting up libgl1-mesa-glx:i386 (10.1.3-Oubuntu0.4) ...
Setting up libgl1-mesa-glx:amd64 (10.1.3-Oubuntu0.4) ...
Setting up freeglut3:amd64 (2.8.1-1) ...
Setting up libdrm-intel1:amd64 (2.4.60-2~ubuntu14.04.1) ...
Setting up libdrm-intel1:i386 (2.4.60-2~ubuntu14.04.1) ...
Setting up libjansson4:amd64 (2.5-2) ...
Setting up libdpkg-perl (1.17.5ubuntu5.4) ...
Setting up dpkg-dev (1.17.5ubuntu5.4) ...
Setting up build-essential (11.6ubuntu6) ...
Setting up cuda-license-7-5 (7.5-18) ...
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Setting up cuda-misc-headers-7-5 (7.5-18) ...
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Setting up cuda-core-7-5 (7.5-18) ...
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Setting up cuda-cudart-7-5 (7.5-18) ...
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Setting up cuda-driver-dev-7-5 (7.5-18) ...
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Setting up cuda-cudart-dev-7-5 (7.5-18) ...
```

```
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Setting up cuda-command-line-tools-7-5 (7.5-18) ...
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Setting up cuda-nvrtc-7-5 (7.5-18) ...
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Setting up cuda-nvrtc-dev-7-5 (7.5-18) ...
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Setting up cuda-cusolver-7-5 (7.5-18) ...
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Setting up cuda-cusolver-dev-7-5 (7.5-18) ...
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Setting up cuda-cublas-7-5 (7.5-18) ...
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Setting up cuda-cublas-dev-7-5 (7.5-18) ...
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Setting up cuda-cufft-7-5 (7.5-18) ...
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Setting up cuda-cufft-dev-7-5 (7.5-18) ...
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Setting up cuda-curand-7-5 (7.5-18) ...
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Setting up cuda-curand-dev-7-5 (7.5-18) ...
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Setting up cuda-cusparse-7-5 (7.5-18) ...
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Setting up cuda-cusparse-dev-7-5 (7.5-18) ...
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Setting up cuda-npp-7-5 (7.5-18) ...
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Setting up cuda-npp-dev-7-5 (7.5-18) ...
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Setting up xorg-sgml-doctools (1:1.11-1) ...
Setting up x11proto-core-dev (7.0.26-1~ubuntu2) ...
Setting up libxau-dev:amd64 (1:1.0.8-1) ...
Setting up libxdmcp-dev:amd64 (1:1.1.1-1) ...
Setting up x11proto-input-dev (2.3-1) ...
Setting up x11proto-kb-dev (1.0.6-2) ...
Setting up xtrans-dev (1.3.5-1~ubuntu14.04.1) ...
Setting up libpthread-stubs0-dev:amd64 (0.3-4) ...
Setting up libxcb1-dev:amd64 (1.10-2ubuntu1) ...
Setting up libx11-dev:amd64 (2:1.6.2-lubuntu2) ...
Setting up libdrm-dev:amd64 (2.4.60-2~ubuntu14.04.1) \dots
```

```
Setting up mesa-common-dev (10.1.3-Oubuntu0.4) ...
Setting up libx11-xcb-dev:amd64 (2:1.6.2-1ubuntu2) ...
Setting up libxcb-dri3-dev:amd64 (1.10-2ubuntu1) ...
Setting up libxcb-render0-dev:amd64 (1.10-2ubuntu1) ...
Setting up libxcb-randr0-dev:amd64 (1.10-2ubuntu1) ...
Setting up libxcb-shape0-dev:amd64 (1.10-2ubuntu1) ...
Setting up libxcb-xfixes0-dev:amd64 (1.10-2ubuntu1) ...
Setting up libxcb-sync-dev:amd64 (1.10-2ubuntu1) ...
Setting up libxcb-present-dev:amd64 (1.10-2ubuntu1) ...
Setting up libxshmfence-dev:amd64 (1.1-2) ...
Setting up libxcb-dri2-0-dev:amd64 (1.10-2ubuntu1) ...
Setting up libxcb-glx0-dev:amd64 (1.10-2ubuntu1) ...
Setting up x11proto-xext-dev (7.3.0-1) ...
Setting up x11proto-fixes-dev (1:5.0-2ubuntu2) ...
Setting up libxfixes-dev:amd64 (1:5.0.1-1ubuntu1.1) ...
Setting up x11proto-damage-dev (1:1.2.1-2) ...
Setting up libxdamage-dev:amd64 (1:1.1.4-1ubuntu1) ...
Setting up libxext-dev:amd64 (2:1.3.2-1ubuntu0.0.14.04.1) ...
Setting up x11proto-xf86vidmode-dev (2.3.1-2) ...
Setting up libxxf86vm-dev:amd64 (1:1.1.3-1) ...
Setting up x11proto-dri2-dev (2.8-2) ...
Setting up x11proto-gl-dev (1.4.17-1) ...
Setting up libgl1-mesa-dev (10.1.3-0ubuntu0.4) ...
Setting up libglu1-mesa-dev (9.0.0-2) ...
Setting up libice-dev:amd64 (2:1.0.8-2) ...
Setting up libsm-dev:amd64 (2:1.2.1-2) ...
Setting up libxt-dev:amd64 (1:1.1.4-1) ...
Setting up freeglut3-dev:amd64 (2.8.1-1) ...
Setting up libxmu-headers (2:1.1.1-1) ...
Setting up libxmu-dev:amd64 (2:1.1.1-1) ...
Setting up libxi-dev (2:1.7.1.901-lubuntu1.1) ...
Setting up cuda-samples-7-5 (7.5-18) ...
Setting up cuda-documentation-7-5 (7.5-18) ...
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Setting up cuda-visual-tools-7-5 (7.5-18) ...
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Setting up cuda-toolkit-7-5 (7.5-18) ...
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Setting up nvidia-352 (352.39-Oubuntul) ...
update-alternatives: using /usr/lib/nvidia-352/ld.so.conf to provide /etc/ld.so.conf.d/x86_64-linux-
update-alternatives: using /usr/lib/nvidia-352/alt_ld.so.conf to provide /etc/ld.so.conf.d/i386-linu:
update-alternatives: using /usr/share/nvidia-352/glamor.conf to provide /usr/share/X11/korg.conf.d/g
update-initramfs: deferring update (trigger activated)
A modprobe blacklist file has been created at /etc/modprobe.d to prevent Nouveau from loading. This
A new initrd image has also been created. To revert, please replace /boot/initrd-3.13.0+37-generic was
*****************
*** Reboot your computer and verify that the NVIDIA graphics driver can
*** be loaded.
*****************
INFO: Enable nvidia-352
DEBUG: Parsing /usr/share/ubuntu-drivers-common/quirks/lenovo_thinkpad
DEBUG: Parsing /usr/share/ubuntu-drivers-common/quirks/dell_latitude
```

```
DEBUG:Parsing /usr/share/ubuntu-drivers-common/quirks/put_your_quirks_here
Adding system user `nvidia-persistenced' (UID 117) ...
Adding new group `nvidia-persistenced' (GID 125) ...
Adding new user `nvidia-persistenced' (UID 117) with group `nvidia-persistenced' ...
Not creating home directory `/'.
Loading new nvidia-352-352.39 DKMS files...
First Installation: checking all kernels...
Building only for 3.13.0-37-generic
Building for architecture x86_64
Building initial module for 3.13.0-37-generic
Error! Bad return status for module build on kernel: 3.13.0-37-generic (x86_64)
Consult /var/lib/dkms/nvidia-352/352.39/build/make.log for more information.
Setting up nvidia-352-uvm (352.39-0ubuntul) ...
Setting up nvidia-352-dev (352.39-0ubuntu1) ...
Setting up nvidia-modprobe (352.39-0ubuntu1) ...
Setting up libxnvctrl0 (352.39-0ubuntu1) ...
Setting up nvidia-settings (352.39-Oubuntul) ...
Setting up nvidia-opencl-icd-352 (352.39-Oubuntul) ...
Setting up cuda-drivers (352.39-1) ...
Setting up cuda-runtime-7-5 (7.5-18) ...
Setting up cuda-7-5 (7.5-18) ...
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************************
*** Please reboot your computer and verify that the nvidia graphics driver is loaded. ***
*** If the driver fails to load, please use the NVIDIA graphics driver .run installer **
*** to get into a stable state.
*******************
Setting up cuda (7.5-18) ...
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Processing triggers for libc-bin (2.19-Oubuntu6.3) ...
Processing triggers for initramfs-tools (0.103ubuntu4.2) ...
update-initramfs: Generating /boot/initrd.img-3.13.0-37-generic
Warning: No support for locale: en_US.utf8
```

7.2 SBIA workstation setup (misc-sbia-setups.rst)

7.2.1 Stuffs installed

Important: I'm sure there's bunch of other softwares I apt-get'ed. Below are just some subset I feel is important.

```
sudo apt-get install padre
sudo cpan Wx

# these i needed for R's mclust package
sudo apt-get install liblapack-dev
sudo apt-get install libblas-dev

# to ssh into this workstation
sudo apt-get install openssh-server
```

```
sudo apt-get install finger
sudo apt-get install colordiff

# 09-03-2016 (01:33)
sudo apt-get install nodejs
```

```
>>> # test this
>>> print "hello"
```