Example and Tutorial for Atom, Git, Github, etc Set-up for Linux

Go back to fan's Tex4Econ and Miscellaneous Repository.

1   Atom Install

Can be directly installed from Ubuntu store.

```
# install atom
sudo apt-get install atom
# install various atom packages that are necessary
apm install vim-mode-plus
```

- *personal access token*: d8a293d30ef620a8b27ab0ad6294cdd8942a0b6f
- *Gist id*: 754fa9ca57eb7ddc1ee89775f934b59f
- *personal access token*: b36b4d26ff2b5b626a1d7f66e3bc60c582a85c21
- *Gist id*: a883a7ba62661dbe9b907d24b651b780

2   Git Install

1. install git
2. once rsa set up, sync repo

```
# install git
sudo apt-get install git
# generate repo directory and sync
mkdir ~/PyFan
# mkdir fanwangecon.github.io PyFan Tex4Econ R4Econ M4Econ Py4Econ Teaching
cd ~/PyFan
git init
# git config only needs to happen once, info stored under ~/.gitconfig
git config --global user.name "Fan Wang"
git config --global user.email wangfanbsg75@live.com
git remote add github git@github.com:FanWangEcon/PyFan.git
git pull github master
```

3   Github and local repo

1. generate rsa
   - ssh-keygen -t rsa -C "wangfanbsg75@live.com", when prompted, do not enter "file in which save the key", when prompted for passphrase, enter "WHATEVERPASSWORDIS"
2. copy key
3. log on to github ssh section, generate new ssh rsa key

```
ssh-keygen -t rsa -C "wangfanbsg75@live.com"
cat ~/.ssh/id_rsa.pub
```

4 Conda Install

conda install linux

1. wget to download from url to download folder
2. bash to install
3. follow instructions, type yes
4. source ~/.bashrc

```
# To remove conda Fully
rm -rf ~/anaconda3

# could be saved in current folder: pwd
# could be saved in download folder: ~/Downloads
wget https://repo.anaconda.com/archive/Anaconda3-2019.10-Linux-x86_64.sh
# install file
bash "Anaconda3-2019.10-Linux-x86_64.sh"
# refresh
source ~/.bashrc

# show all installed packages under current envir
conda list
# see where key files are installed
which python
which conda
# use conda-forge as main channel and update all
/* conda config --add channels conda-forge */
conda update --all
```

Additional statistics and related models to install:

```
conda install -y statsmodels datashape seaborn
# conda install statsmodels
# conda install datashape
# conda install seaborn

conda install -c conda-forge -y interpolation awscli
# conda install -c conda-forge interpolation
# conda install -c conda-forge awscli

conda install -c anaconda -y boto3

# conda install -c r r-irkernel
```

4.1 Install PyCharm

PyCharm can be installed from Ubuntu apps.

```
<!-- for Debian -->
sudo tar xfz pycharm-*.tar.gz -C /opt/
cd /opt/pycharm-*/bin
./pycharm.sh
```

5   R install

R could be installed first as below. Or follow the instructions on this page to install from conda an environment
for R, with associated R-studio.

```
# Debian R is maintained by Johannes Ranke, copied from https://cran.r-project.org/bin/linux/debian/:
apt-key adv --keyserver keys.gnupg.net --recv-key 'E19F5F87128899B192B1A2C2AD5F960A256A04AF'
# Add to source.list, for debian stretch (9)
# sudo su added for security issue as super-user
sudo su -c "sudo echo 'deb http://cloud.r-project.org/bin/linux/debian stretch-cran35/' >> /etc/apt/sour
# if added wrong lines, delete 3rd line
sudo sed '3d' /etc/apt/sources.list

# Update and Install R, should say updated from cloud.r
sudo apt-get update
sudo apt-get install r-base r-base-dev
```

6   Install Other Programs and Packages

Other key programs and packages to install.

- vim: faster editor, on lower resource machines, atom is slow and typing could feel laggy.
- htop: for resource monitoring

```
sudo apt-get install vim
sudo apt-get install sublime-text
sudo apt-get install htop
```