

## OS X Setup for Data Science - R, MySQL, IPython, Git

### **Command to install Homebrew via OS X terminal:**

`$ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"`  
Homebrew will be installed in the /usr/local directory

### **Useful Homebrew Commands for OSX:**

- Updates for OSX: `$brew update` # (updates list of available packages)
- Upgrades for OSX: `$brew upgrade` # (installs newer versions of packages)
- List all the packages installed by brew: `$brew list`
- List broken packages/installers: `$brew doctor`

### **Install R in OSX via terminal:**

- `$brew tap homebrew/science`
- `$brew install gcc`
- `$brew install Caskroom/cask/xquartz`
- `$brew install r`

### **Install R-Studio:**

- Website: <https://www.rstudio.com/products/rstudio/download/>

### **Install MySQL & MySQL Workbench:**

- Website: <https://coderwall.com/p/os6woq/uninstall-all-those-broken-versions-of-mysql-and-re-install-it-with-brew-on-mac-mavericks>
- Access mysql from terminal: `mysql -u root -p`
- Install MySQL workbench: `$brew cask install mysqlworkbench`

### **Install Python v2.7, Anaconda and Jupyter:**

- Anaconda Installer 32/64 bit for Python 2.7: <https://www.continuum.io/downloads>
- Copy downloaded file to the desired directory and execute the command below via terminal:  
`$bash Anaconda2-2.4.0-Linux-x86_64.sh`
- Restart the terminal
- Check python version: `$python --version`
- Install jupyter via Anaconda: `$conda install jupyter`
- Update Conda Installer: `$conda update conda`
- Update Anaconda: `$conda update anaconda`
- Check ipython notebook: `$ipython notebook`
- Pymysql database connectors for python: `$conda install pymysql`

**Install R Kernel for Jupyter:**

- Install zmq package: `$brew install zmq`
- Update/Upgrade brew
- Open R via Ubuntu terminal (type `R` in the terminal) and execute the following commands:

#1. Install New Packages:

```
install.packages(  
  c('rvmq','repr','IRkernel','IRdisplay'),  
  repos = c('http://irkernel.github.io/', getOption('repos'))  
)
```

#2. Install IR Kernel

```
IRkernel::installspec()
```

**Basic Conda Commands:**

- Conda version: `$conda --version`
- Update Anaconda: `$conda update anaconda`
- Update Conda Installer: `$conda update conda`
- List all installed Conda packages: `$conda list`
- Search for a package: `$conda search packageName`
- Install Conda packages: `$conda install packageName` or `$pip install packageName`
- Remove installed Conda package: `$conda remove packageName`

**Install Git:**

- `$brew update`
- `$brew install git`

**Check command history:**

- Terminal command history from start till shutdown: `$history > history.txt`
- View terminal history: `$cat history.txt`