

# New Computer Software Setup

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Whenever I get a new computer I spend time installing a variety of software. This guide is intended to serve as a reminder about what I install and how to install it. In writing this guide I hope to save myself much time going through StackOverflow posts.

## 1 Web Browsers

First we need to find something better than Internet Explorer. Firefox is downloaded from here:

<https://www.mozilla.org/en-US/firefox/new/>.

Google Chrome is downloaded from here:

<https://www.google.com/chrome/browser/>.

## 2 Git

Git can be downloaded from here:

<http://git-scm.com/downloads>.

Run the installer. After installing open a git bash shell. Run the commands `git config --global user.name "Travis"` and `git config --global user.email "twestura@gmail.com"`.

Optionally we could install GitHub for Windows and do something to save my password.

## 3 Sublime Text 2

I use Sublime Text 2 without a license, as doing so is free and the annoying pop-up message is infrequent. It can be downloaded here:

<http://www.sublimetext.com/2>.

Just download the Windows 64 bit version. Simply run the installer after downloading.

## 4 Emacs

Ahh yes: Emacs. Let's get it running on Windows. I downloaded Emacs by using the link on the instructions for setting up  $\text{\LaTeX}$  on Windows here:

<http://www.latexbuch.de/install-latex-windows-7/#x1-110003.1>.

<sup>1</sup> I unzip everything on my desktop and create a folder called emacs in my Program Files. Copy everything from the unzipped file into this folder. There is an installer addpm.exe in bin that can be run, although I am not sure what it does.

I may then need to set the HOME environment variable to be C:\Users\Travis, as described here:

[https://www.gnu.org/software/emacs/manual/html\\_node/emacs/Windows-HOME.html](https://www.gnu.org/software/emacs/manual/html_node/emacs/Windows-HOME.html).

I may also want to add emacs to my path variable. To run emacs in the command shell, the command is emacs -nw, with the nw meaning nonwindowed.

I will also need to create a .emacs file. I cannot create file names that begin with periods in a file explorer. But I can simply create the file using emacs. To add line numbers by default, add the line (global-linum-mode 1) to the .emacs file.

For instructions on how to set up L<sup>A</sup>T<sub>E</sub>X with emacs, see section 5.2.2.

## 5 L<sup>A</sup>T<sub>E</sub>X

### 5.1 Installation

I use the TexLive distribution that can be obtained here:

<https://www.tug.org/texlive/acquire-netinstall.html>.

Use the install-tl-windows.exe installer. The installation can take quite some time.

I use TexLive to be consistent across multiple platforms, as MikTeX only supports Windows.

There may be something else that needs to be installed called getnonfreefonts. The link is

<https://www.tug.org/fonts/getnonfreefonts/>.

Download the file and navigate to the directory containing it in a command line. Then run texlua install-getnonfreefonts getnonfreefonts-sys-a.

### 5.2 Text Editors

I use several text editors with L<sup>A</sup>T<sub>E</sub>X. In the following I describe how to get L<sup>A</sup>T<sub>E</sub>X to work with these editors. Other installation and setup instructions for these editors can be found in the respective sections for the editors.

#### 5.2.1 Sublime

#### 5.2.2 Emacs

To use L<sup>A</sup>T<sub>E</sub>X, we want to set up AUCTEX. We can download it here:

<http://www.gnu.org/software/auctex/download-for-windows.html>.

Unzip the folder and make sure the contents are contained in a folder called auctex. Then make sure this folder is contained inside the emacs folder. A simple test pdf document can then be compiled using C-c C-c RET. Several sites said to install Ghostscript, so I downloaded it from here:

<http://www.ghostscript.com/download/gsdnld.html>.

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<sup>1</sup> This version is probably old. There is likely a new version simply on the emacs website. There is no installer required, so I should be able to unzip the zip folder and run it. I am not sure what a precompiled version, but I assume that I would need to compile it. Anyway I should be able to use a version that is not precompiled.

Actually, it seems as though the link is updated to the latest version. However, it would not hurt to check whenever I want to download something.

I set up a GhostScript printer with the instructions from here:

<http://www.latexbuch.de/install-latex-windows-7/#x1-110003.1>.

I also downloaded GSView from here:

<http://pages.cs.wisc.edu/~ghost/gsview/get50.htm>.

The answer to this question looks amazing:

<http://tex.stackexchange.com/questions/50827/a-simpletons-guide-to-tex-workflow-with-emacs>.

I downloaded and installed ASpell from here:

<http://aspell.net/win32/>.

There are many changes that are made in the emacs init file to facilitate working with L<sup>A</sup>T<sub>E</sub>X.

## 6 Java

Download the latest version of Java from the Oracle downloads page:

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>.

To check to see if the installation was successful, open a command line and execute `java -version`. This command should work. Next execute `javac -version`. If this command does not work, then the location of `javac.exe` needs to be added to the path. Right-click on Computer, go to the Advanced System Settings, and click on Environment Variables. There should be a variable named Path that we need to edit. Select Path and click edit, or create a new variable named Path if one does not exist. Append to the variable the file path leading to `javac`. This path should end with the bin folder in the jdk that contains `javac`. Afterwards check that the Path is correct by running the command `javac -version` again. The command line may need to be restarted for the change in Environment Variable to take effect.

## 7 Eclipse

I use Eclipse when working with Java and Python. This section covers how to set up Eclipse to work with Java and explains the plugins I use for Java. For instructions using PyDev see section 8.2.

### 7.1 Installation

Eclipse can be downloaded here:

<https://www.eclipse.org/downloads/>.

Simply unzip the folder and it should work; no installer should be necessary.

### 7.2 Plugins

## 8 Python

To install python, I need to install both the language itself and several additional modules. I also need to set up PyDev with Eclipse.

## 8.1 Installation

For installation, I use the version that we use in CS 1110. The install link is here:

<http://www.cs.cornell.edu/Courses/cs1110/2014fa/materials/python.php>.

I download this version and the Cornell Extensions.<sup>2</sup> I then install Komodo Edit from the same page.

## 8.2 PyDev

## 8.3 Other Python Modules

I need to add several other python modules to their respective folders.

### 8.3.1 PyLint

### 8.3.2 Coverage

## 9 Microsoft Visual Studios

I use the Express version because it is free. Perhaps there is a DreamSpark thing I could do to get the Professional or Ultimate editions for free. The download link is here:

<http://www.microsoft.com/en-us/download/details.aspx?id=40787>.

Download both of the files. Run the `wdexpress_full.exe` file, which is the installer.

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<sup>2</sup> I should at some point dig into the Cornell Extensions and figure out what modules and packages they contain.