# Useful tools for an efficient setup

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# **Meetings and lectures**

#### **General organisation**

- Doodle
- <u>LettuceMeet</u>
- Shared calendar (Microsoft, Google, Apple)
- Indico

#### **User involvement**

- Google / Microsoft forms
- Mentimeter

# **Version Control System (VCS)**

Keep your code organised and versioned.

- GitHub
- Bazaar
- BitBucket

## The Shell

#### Your best friends

- grep, ls, rm, tar, gunzip, curl, cd, vim
- dotfiles (.bashrc/.zshrc, .profile, ...), export PATH, aliases
- the-art-of-command-line
- regular expressions

#### **Boost it!**

- zsh (with <u>Powerlevel10k</u> theme)
- oh-my-zsh

#### Other useful tools

- djvu2pdf
- ffmpeg

- ghostscript
- ImageMagick

## **Code editors**

- Visual Studio Code (my favourite)
- Sublime Text 3 (my 2<sup>nd</sup> favourite and the fastest)
- Eclipse (useful for Java developers a.k.a. Minecraft modders)
- Atom
- PyCharm (very good for Python)
- XCode (only for Mac users, useful for app developers, mainly iOS)
- Vim
- Emacs
- Gedit

# **Python**

#### Manage environments and packages

- Anaconda (complete suite to manage everything, available also in a lighter version Miniconda - really, what is Python without Anaconda?)
- Pyenv (light and simple)

#### **Packages**

- jupyter (for notebooks and interactive Python programming)
- numpy, scipy, pandas (must have)
- re (regular expressions in Python)
- PyROOT (from CERN)

## **Write documents**

- LaTeX (the best of the best)
  - TeXLive (recommended, full multiplatform distribution)
  - MikTex
  - MacTex (only for Mac users)
- Markdown
- Microsoft Office Word

# **Presentations**

- Microsoft Office PowerPoint
  - <u>IguanaTeX</u> (typeset LaTeX on PowerPoint!)
- Keynote (for Mac users)
- Prezi (very nice flowing design)
- Beamer (presentations with LaTeX)
- Reveal.js
  - difficult to use if you are not a JavaScript developer (unless you buy the editor)
  - allows to humiliate the other speakers, because your slides would be fairly better than theirs

### Draw pictures: vectorial pictures usually better than raster

- Inkscape
- Tikz (LaTeX packages)

# LaTeX

#### **Essential**

- Math
  - derivative
  - mathtools
  - bm
  - siunitx (typeset units like a pro)
- Page formatting
  - fancyhdr
  - titlesec
- References
  - hyperref
  - cleveref

# LaTeX

- Drawing
  - tikz
  - tcolorbox
  - tikzfeynman (for Feynman diagrams)
- Figures
  - graphic
  - floatrow
  - caption
- Tables
  - tabularx
  - booktabs
  - multirow

# LaTeX

- Code
  - listings
  - verbatim
- Bibliography
  - biblatex
- Compilers
  - pdflatex
  - xelatex (useful for font formatting)
  - lualatex (for tikzfeynman)

## Windows users

- Why?
- Seriously, why?

#### Only way to develop on Windows 10

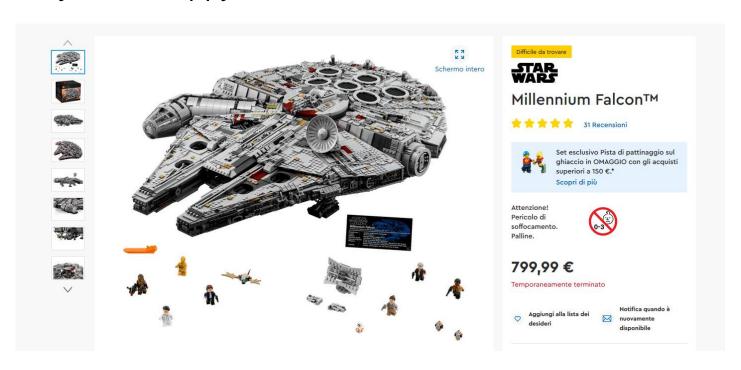
- Windows Subsystem for Linux (WSL), now on version 2
- Xming, VcXsrv, X410
- Windows Terminal

Look: Far More Epic Development Environment using WSL 2

Watch out AMD CPUs and WSL2! Update the driver before enabling virtualisation, see <u>issue 4784</u>.

## For Mac users

- Buy a better computer
- With the remaining 800€ from the budget: buy a LEGO Millennium Falcon
- Now you are happy



## For Mac users

- Buy a better computer
- With the remain:

  Just kidding
- · ... you are happy

### Basically you are already set

- Reliable system
- Brew
- Macports
- Big plus if you have other Apple devices

Juy a LEGO

# **Productivity**

#### **Focus**

- Forest (app)
- Pomodoro technique
- Stretchly
- Caffeine

#### **Notes**

- Microsoft To-do
- Evernote
- Zoho Notebook

# Random useful links

- Regular expression test
- Codecogs
- WebPlotDigitizer
- Have I Been Pwned?
- ID Ransomware