1 Mandatory tools

oh-my-zsh

Plugins

- git (autocompletion and explanation for git commands)
- sudo (esc) + esc) toggle sudo before command)
- · docker (autocompletion for docker)
- · Search for plugins for the tools you use the most

Aliases

- $\cdot \cdot \cdot (\cdot \cdot)$ (each dot appending ' $\cdot \cdot$ ' means one folder before)
- take <dir> (mkdir <dir> ; cd <dir>)
- d, 1, 2, 3... (d shows lastest directories visited, each number moves to corresponding dir)
- l = ls -lah (list long, all and for humans)

Pros

Very powerful **autocompletion** (<u>case insensitive</u>, <u>navigate</u> through autocompletion suggestions with arrow keys)

With tab you can move/write args/see cmd's options quickly and easily

Start writing a cmd and press \uparrow to navigate through latest cmds matching the written beginning

Themes are really useful. Provide information as: git status of current dir (if working directory is a repository), information about last execution return code, information of the time elapsed since command execution until termination, etc.

Cons

Special matching char '*' does not work by default. (Fix it with *echo 'setopt +o nomatch' » -/.zshrc*)

Special attention when doing *source any-file.bash* files. Now will be *source any-file.zsh*. (Attention using ROS)

Some scripts won't work with zsh, if strange errors occurs, just try using bash.

Tips

Burn your **tab** key!



fzf



 \mathbf{ctrl} + \mathbf{t} \rightarrow fuzzy finder for files and dirs

Linux stuff:\$

terminator

Pros

Multiple terminals in the same window with easy and quick navigation/creation/modification shortcuts. Highly recommended while working with ROS.

Tips

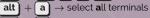
Right click on the terminal > Preferences > Profiles.

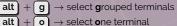
Then in **scrolling** tab: Add one more zero to scrollback lines number. Big errors contains more 500 lines

Add one new **profile**, then go to **colors** tab, and select *black* on **white** as built-in scheme. This profile is now available right clicking in the terminal over the profiles list. It is really needed when working at the sun.

Shortcuts

```
ctrl
            shift
                        o → horizontal split
ctrl
            shift
                         e \rightarrow vertical split
ctrl
            shift
                         \mathbf{w} \rightarrow \text{close current pane}
ctrl
            shift
                         \mathbf{x} \rightarrow e\mathbf{x} pand current pane to full window size
ctrl
            shift
                      + |z| \rightarrow zoom current pane to full window size
ctrl
                                                 \rightarrow resize panes
alt
                            \rightarrow \rightarrow move through panes
```







vscode

Pros

Easy installation \rightarrow snap install code -classic **Extensions**



- · C/C++
- · Python
- · Clang-Format
- · Git Lens
- · Git Graph

- · Markdown PDF
- · Remote SSH
- · Settings Sync
- · Bracket Pair Colorizer
- · Coding In The Sun!

Useful shortcuts

 $(\underline{\mathsf{ctrl}} + \underline{\mathsf{k}}) + \underline{\mathsf{s}} \to \mathsf{see} \ \mathsf{all} \ \mathsf{s} \mathsf{hortcouts} \ (\underline{\mathsf{good place}} \ \mathsf{to} \ \mathsf{search})$

 $\frac{(ctrl)}{(ctrl)} + \frac{(k)}{(k)} + \frac{(c)}{(ctrl)} \rightarrow c$ omment selected lines

ctrl + d \rightarrow new cursor on next ocurrence of selected text

2 Useful stuff

Shell shortcuts

$[ctrl] + [a] \rightarrow$ move cursor to the beginning of the line
$ctrl$ + e \rightarrow move cursor to the end of the line
$ctrl$ + l \rightarrow clear terminal
$ctrl$ + z \rightarrow suspend current process
If a process is suspended, it can be resumed typing fg (foreground)
or bg (background)
$ctrl + \longleftarrow \longrightarrow move$ cursor one word forward or backwards
$ctrl$ + w \rightarrow cut last word
$ctrl$ + k \rightarrow cut command from cursor to the end
$ctrl$ + y \rightarrow paste cut string
$\overline{alt} + \overline{t} \rightarrow \text{swap last words}$

 $+ \bigcirc \rightarrow$ type last argument of last command

Useful commands

man
whatis display one-line manual page descriptions whereis locate the binary, source, and manual page files for a
command
which locate a command
whoami print your effective userid
watch execute a program periodically, showing output fullscreen
pwd print working directory ping send ICMP ECHO_REQUEST to network hosts
nmap Network exploration tool and security / port scanner (sudo
apt install nmap)
ifconfig multiple configuration for network interfaces (sudo apt
install net-tools)
htop interactive process viewer (sudo apt install htop)
head,tail output the first/last part of files more,less file perusal filter for crt viewing/the opposite
history print last executed commands
find search for files or dirs in a directory hierarchy
grep print lines matching a pattern
neofetch . a fast, highly customizable system info script (sudo apt
install neofetch) apropos tells you commands that approximate the input you give
gdb the GNU debugger
cmake-gui, ccmake Graphical/Terminal User Interface for cmake
(sudo apt install ccmake cmake-qt-gui)
mount/umount Attach/unattach filesystem to specific
mountpoint Drint or control the Learnel ring buffer
dmesg Print or control the kernel ring buffer

Shell special characters

- ~ Home directory
- # Comment
- \$ Variable expression
- & Background job
- * Ctuin an unit al a a unit

* String wildcard

(cmd...) Subshell

\ Quote next character | 1 Character-set wildcard

{ cmds... } Command block

; Shell command separator

"..." Strong quote

"..." Weak quote

</>Input/Output redirect

/ Pathname directory sepa-

? Single-character wildcard

! Pipeline logical NOT

by:lotape6