

# 一些我觉得有用的工具和方法

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# Sample

In this slide, some important text will be<sup>1</sup> highlighted because it's important. Please, don't abuse it.

## Remark

Sample text

## Important theorem

Sample text in red box

## Examples

Sample text in green box. The title of the block is "Examples".

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<sup>1</sup>footnote will be here

- 如标题所言, 只是介绍一些我认为有用的, 我自己经常使用的工具.
- 如果您发现我介绍的某个工具/某种技术在您的平台没有官方支持.
- 如果您发现我口胡的某个理论有明显谬误.
- 如果您发现我的讲述方式过于不友好.
- 如果您发现我在浪费您的时间.
- ...

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请您务必及时联系我, 指出问题所在, 我会尽快进行修正  
因为我非常重视我的产出的质量, 尤其是公开于其他人的内容.  
欢迎来打爆我 ~~qwq...QQ~~, 微信平台除外

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So, Let's get started

## 这是什么

是工作环境的基础，是整个系统暴露给我们的接口，通过它们进行各种操作。

- fish: friendly interactive shell
  - semantic colorizing (path, command, option, variables)
  - intuitive syntax&commands
  - suggestions&completion
  - work out of the box
- python: a Beautiful, Explicit, Simple, Sparse programming language that lets you work quickly and integrate systems more effectively
  - suitable for scripting (automatically perform tasks for human).
  - well-developed eco-system for nearly every field.
  - get support from powerful&friendly python users everywhere.
- GNU coreutils: ls, rm, mkdir, cat, tee ...

## Examples

这怎么用？

## terrible (but common) cases

```
rm ~/secret-donot-let-the-TAs-know/spinach-cs100-hw-source.tar.gz  
rm ~/secret-donot-let-the-TAs-know/spinach-cs101-hw-source.tar.gz
```

## Examples

```
alias rm="trash"
```

- Delete a file (send to trash):  
`trash path/to/file`
- List files in trash:  
`trash-list`
- Restore file from trash:  
`trash-restore`
- Empty trash:  
`trash-empty`
- Empty trash, keeping files trashed less than 10 days ago:  
`trash-empty 10`
- Remove all files named 'foo' from the trash:  
`trash-rm foo`
- Remove all files with a given original location:  
`trash-rm /absolute/path/to/file_or_directory`

further: **btrfs** subvolumn snapshot

git: ~~a version control software~~ the distributed version control system



# broot/ranger

explorere.exe in your terminal emulator

## what is broot/ranger

- ranger: A simple vim-like TUI file manager
- broot: fuzzy search path + tree view + quick cd

## Examples

效果如图所示.

## what is fzf, rg, ag

- fzf: **F**uzzy **F**ile **F**inder
- rg: rip grep. Search for matched patterns.
- ag: the silver searcher. Code Searching tool.

## Examples

效果如图所示.

# (neo) vim<sup>2</sup> a ~~editor~~ the editor!

## features

- multiple editing modes (insert, normal, visual ... up to 12 modes)
- customizability (builtin vimscript/lua VM + python/node.js/ruby RPC)
- lightweight
- strong community support

## No more MS visual studio code

- Microsoft Visual Studio Code. (×)
- vscode Code-OSS (✓)

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<sup>2</sup>or emacs, xray

Do not miss the KEY part of this lecture

## What is TL;DR pages

Simplified and community-driven man pages

- “TL;DR” stands for too long; don't read or 太长不看 in Chinese.
- [tldr.sh](https://tldr.sh) is the official site for TL;DR pages project.

## Examples

DFS

- 1 `tldr systemd-timesyncd`
- 2 `man systemd-timesyncd`
- 3 `curl https://www.google.com/?q=systemd-timesyncd`

## effective searching tips

- search by \*keywords\*  
使用搜索引擎就是查字典，你难道和字典讲自然语言吗
- use the advanced filtering commands
- take advantages over vertical search and in-site search

## Examples

呜呜, 我的 kernel 挂了. 你能帮帮我吗 qwq.

## Troubleshooting: how-to

- 1 information gathering
- 2 fix it your self?
- 3 requesting for support
- 4 hacking!
- 5 ∞ recording & sharing

# A few more things 你们还是另请高明吧

## (personally) recommended applications

- i3wm, bspwm
- rofi
- tmux
- graphviz
- surfing keys / vimnium

## resources

- wikipedia
- stackexchange
- github
- arch linux community wiki

- 每个人都缺乏 “对于自己不熟悉的领域的常识”
- 知道该搜索什么, 哪些关键词是与自己手头的问题相关的, 是相当重要并且市场被忽略的.
- 实用优先于意识形态, 但不可消灭意识形态.
- 优质教程和文档本该存在, 因为它们帮助项目吸引 users 和 collaborators, 你要做的只是找到这些东西, 并且跟随它即可.

# Q&A<sup>3</sup>

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<sup>3</sup>这次的内容过少, 准备不足. 效果不佳. 故不会放在 [github](#) 上面. 也不会 anywhere 发布/分发.  
[Follow me on github.](#)  
We warmly welcome further discussion/error correction/suggestions.