

面向人工智能研究的计算机技能分享

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① 背景

② Environment

③ Linux

④ 杂项

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由来及参考

- MIT: The Missing Semester of Your CS Education (计算机教育中缺失的一课)
- ZJU-竺院: 实用技能拾遗
- " 很长时间你们都被困在墙内"

简介

- 包括: 镜像站, 代理, 虚拟环境, Shell, CLI, 后台运行, 发行版, LaTeX 等.
- 不包括: 如何访问 GitHub 等网站.

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mirrors

Tuna, BFSU, HIT, USTC, ..., JLU!

















- `pip install -upgrade numpy`
`-i https://mirrors.jlu.edu.cn/pypi/simple/`
- `/.condarc`
- `/etc/apt/source.list`
- `/etc/pacman.d/mirrorlist`
- `pacman-mirrors`

mirrors

中文 / English



Jilin University Open-source Mirrors

Name	Last Update	Next Update
anthon 	12 hours ago	in 2 minutes
apache	1 hour ago	in 5 hours
archlinux  	1 hour ago	in 21 minutes
archlinuxarm 	3 hours ago	in 15 minutes
archlinuxcn 	5 hours ago	in 3 hours
centos  	3 hours ago	in 15 minutes
CTAN  	10 hours ago	in 3 hours
deb-multimedia 	20 hours ago	in 5 hours
debian 	2 hours ago	in 2 hours
debian-cd 	10 hours ago	in 3 hours
debian-security	1 hour ago	in 32 minutes
deepin 	4 hours ago	in 7 hours
deepin-cd  	17 hours ago	in 7 hours
endeavourous 	3 hours ago	in 46 minutes

News

9 月 23 日维护公告 (完成) (2023-09-21)
镜像站开放公开访问 (2023-04-27)
镜像站升级公告 (2023-01-06)
and more...

Distros

Download installation images of common Linux distributions here.

Get Images


Routes

mirrors.jlu.edu.cn	Automatic
mirrors4.jlu.edu.cn	IPv4 Only
mirrors6.jlu.edu.cn	IPv6 Only

Links

 1: <https://mirrors.jlu.edu.cn/>

mirrors



List

26 ✓

Site

LZUOSS

39 ✓ 3 ●

Help

NJTech

22 ✓ 2 ●

About

NJU

330 ✓ 9 ● 6 ● 3 ● 11 ● 9 ●

NYIST

156 ✓ 2 ● 2 ●

PKU

50 ✓ 3 ●

URL: <https://mirrors.jlu.edu.cn>

Name: 吉林大学开源镜像站

Homepage: <https://jlulug.org>

Disk: 12.66/40.97 TiB + 15.63/17.8 TiB

Issue: <https://github.com/JLULUG/issues/issues>

Mirror Request: <https://github.com/JLULUG/issues/issues/new/choose>

Email: mirrors@jlu.edu.cn

Group: QQ 1026894631 / TG @JLULUG

anthon	✓ Success 59 seconds ago → Next in 11 hours	apache	✓ Success 2 hours ago → Next in 4 hours
archlinux	✓ Success 2 hours ago → Next in 17 minutes	archlinuxarm	✓ Success 4 hours ago → Next in 11 minutes
archlinuxcn	✓ Success 5 hours ago → Next in 2 hours	centos	✓ Success 3 hours ago → Next in 11 minutes
CTAN	✓ Success 10 hours ago → Next in 3 hours	deb-multimedia	✓ Success 22 hours ago → Next in 5 hours
debian	✓ Success 3 hours ago → Next in 2 hours	debian-cd	✓ Success 11 hours ago → Next in 2 hours
debian-security	✓ Success 2 hours ago → Next in 28 minutes	deepin	✓ Success 5 hours ago → Next in 7 hours
deepin-cd	✓ Success 17 hours ago → Next in 7 hours	endeavourous	✓ Success 3 hours ago → Next in 41 minutes
fedora	✓ Success 1 hour ago → Next in 53 minutes	garuda-linux	✓ Success 6 hours ago → Next in 11 minutes
immortalwrt	✓ Success 11 hours ago → Next in 22 hours	knoppix	✓ Success 18 hours ago → Next in 8 hours

图 2: MirrorZ.org

proxy

- WebVPN 助手: <https://greasyfork.org/scripts/395271>
- 包管理器使用代理: <https://github.com/rosebe/FUCK-GFW>
- Transparent Proxy

proxy

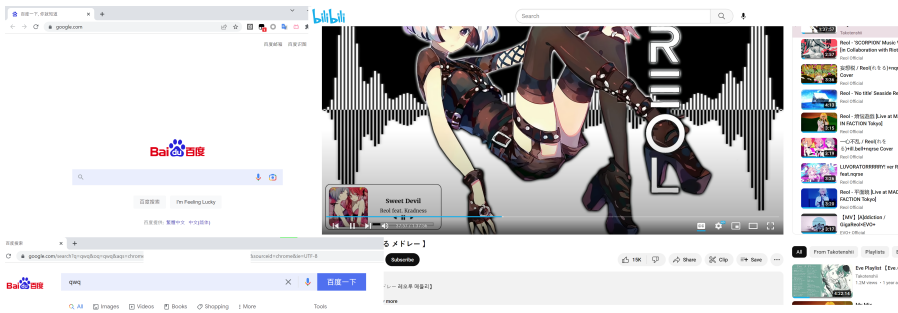


图 3: 将国际网站伪装成中国网站

- <https://github.com/userElaina/this-is-the-China-website>
- <https://greasyfork.org/scripts/461427>

虚拟环境

- `py -m venv ENV_DIR`
- Anaconda / Miniconda
- `conda create -n ENV_NAME python=x.x`
- Docker
- Virtual Machine: WSL, Sandbox, Hyper-V, VirtualBox, VMware, Qemu, PVE, ESXi, ...

虚拟环境 - Windows

Control Panel - Programs - Turn Windows features on or off:

- Hyper-V
- Windows Hypervisor Platform
- Windows Sandbox
- Windows Subsystem for Linux

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Shell

Shell is not Terminal!

- bash: Bourne Again Shell, default.
- Zsh: Z Shell, <https://ohmyz.sh/>.
- fish: Friendly Interactive Shell, generates by parsing man pages.

Help

- `--help`
- `man`
- `tldr`
- RTFM, STFW

IDE

- 编译器: 是将原始语言源代码转换成目标语言计算机程序. gcc, msvc, clang, ...
- 编辑器: 文本编辑. Vim, NeoVim, VSCode, ...
- 集成开发环境 (IDE): 能编辑, 构建, 测试, 打包的软件. VS, JetBrains, ...

CLI

- `ls -ahl`: all, human readable, long listing format
- `diff`, 比较文件
- `cat`, `bat`, 输出与拼接文件
- `xxd`, `hexyl`, 十六进制输出文件
- `find`, `fd`, 查找文件
- `grep`, `ripgrep`, 搜索文件内容
- `top`, `htop`, `bttop`, "任务管理器"
- `make`, `cmake`, 自动化
- `neofetch`, 显示系统信息
- `FFmpeg`, 多媒体处理

SSH (SCP)

- `ssh-keygen -t ed25519 -C "userelaina@pm.me"`
- `cat ~/.ssh/id_ed25519.pub`
- `ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIKmmagvzHfnb
NiN3mKrLYqCirEm75But9tKxKas5VX4n userelaina@pm.me`
- `vim ~/.ssh/id_ALGORITHM`
- `ssh -i ~/.ssh/id_ed25519 -p 50022 user@nas.mil`
- `scp -P 50022 -r ./a/ user@192.168.1.2:~/t1/`

Git (GitHub)

- `git clone https://github.com/opencv/opencv.git`
- `git clone git@github.com:opencv/opencv.git`
- `git clone -recurse-submodules -remote-submodule https://github.com/bad-apple-lab/Bad-Apple.git`
- GitHub - Settings - SSH and GPG keys
- `vim ~/.ssh/config`
- `ssh -T git@github.com`

后台运行

- `&`
- `nohup CMD > LOG 2>&1 &`
- `screen`
- `Tmux`

Distribution

- Debian and Ubuntu
- Arch Linux and Manjaro
- RHEL and CentOS
- Kali Linux and Black Arch Linux
- Deepin

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Markdown

- 轻量级文本标记语言 (markup language)
- 易读易写, 电子邮件; html; css.
- CommonMark, GFM, Pandoc, Typora, ...
- VSCode: Markdown Preview Enhanced.

LaTeX

- 引擎: TeX, pdfTeX, XeTeX, LuaTeX, ...
- Why? Template, 专注于内容.
- How? LaTeX Workshop, TeXStudio, Overleaf, ...
- IEEE
- <https://github.com/geekifan/jluthesis>
- https://github.com/jiafeng5513/JLU_Dissertation
- <https://github.com/userElaina/Open-JLU>

Q & A

Thanks!