

Developer Tools & Setup

Essential developer tooling: Docker workflows, GitHub tricks, and CLI tools for modern software engineering and DevOps.

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Recommended Tools

- [NeoHtop](#) — Modern htop alternative
 - [Cap](#) — Open source Loom alternative for screen recordings
 - [RustDesk](#) — Open source remote desktop
 - [Helix Editor](#) — Post-modern modal editor
 - [Blender MCP](#) — Blender + MCP integration
 - [RX Resume](#) — Resume builder
 - [Practical Computer Vision](#) — CV learning resources
 - [CUDA Codes](#) — CUDA flash attention algorithms
 - [Intel RealSense HDR](#) — HDR depth cameras
 - [Apple ML-GBC](#) — Apple ML framework
 - [Python CLI](#) — Python CLI tool
 - [Data Structures for Image Processing](#) — Newsletter
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Shell Essentials

Echo & Variables

- `echo "value is $foo"` → value is bar (variable expanded)
- `echo 'value is $foo'` → value is \$foo (literal)
- `foo=bar` — no space around `=`
- `$PATH` — environment variable
- `cd -` — go to previous directory

Navigation

- `/` — root directory
- `~` — home folder
- `.` — current folder
- `..` — parent folder
- Absolute path starts with `/`, relative path starts with `folder/file`

Shortcuts

- `Ctrl+L` — clear terminal

- `Ctrl+R` — reverse search history
- `!!` — repeat last command

Pipes & Redirection

- `;` — run commands sequentially
- `&&` — run next only if previous succeeded
- `|` — pipe output to next command
- `>>` — append to file
- `#` — root/sudo prompt

Useful Commands

- `xdg-open file` — open with default app
- `ulimit -a` — show memory limits
- `htop` — process monitor
- `tldr` — simplified man pages
- `locate` / `ripgrep (rg)` / `fzf` / `broot` / `nnn` — search & file managers

Custom Functions

```
mcd () {
    mkdir -p "$1"
    cd "$1"
}
source mcd.sh
```

Python One-Liner

```
#!/usr/bin/env python
import sys
for arg in reversed(sys.argv[1:]):
    print(arg)
```

Vim Quick Reference

Key	Action
<code>i</code>	Enter insert mode
<code>Esc</code>	Exit insert mode
<code>r</code>	Replace character
<code>k</code>	Move up

Key	Action
<code>S-V</code>	Visual line select
<code>C-V</code>	Visual block select
<code>:</code>	Command mode

Docker Tips

Shrink WSL Disk

```
wsl --shutdown
diskpart
select disk file="C:\Users\[USER]\AppData\Local\Docker\wsl\disk\docker_data.vhdx"
compact disk
```

GitHub Tips

Quick Access

- Press `.` on any GitHub repo to open web-based VS Code editor

GitIngest

Turn any GitHub repo into readable text for LLMs. Replace "hub" with "ingest" in the URL: - Repo:

<https://github.com/user/repo> - Ingest: <https://gitingest.com/user/repo>

PR Code Review

Add `.diff` to the end of any PR URL to see raw changes. Paste into ChatGPT/Grok for AI code review: - PR: <https://github.com/user/repo/pull/42> - Diff:

<https://github.com/user/repo/pull/42.diff>

GitSummarize

Replace "hub" with "summarize" in any GitHub URL for AI-powered documentation: - Repo:

<https://github.com/user/repo> - Summary: <https://gitsummarize.com/user/repo>