

Optimization Workshop



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Mac Shortcuts (you probably already know)

Shift Arrow	Highlight text
Command left or right arrow	Jump to ends of line of text
Command up or down arrow	Move insertion point to top or bottom of document
Option arrow	Jump in the text by word
Shift-Command-Tilde (~)	Switch windows
Shift-Command-4 or 4	Screenshot
Fn left or right arrow	Scroll to top or bottom of the page
Fn up or down arrow	Scroll up or down one page

[more shortcuts](#)

Browser extensions - for chrome

- How to get one:
 - [chrome web store](#)
- Productivity boosters / Distraction blockers:
 - Citrus
 - WasteNoTime
 - Block & Focus
- Password managers:
 - Blur
 - LastPass
- Bookmark managers/sync:
 - Xmarks bookmarks sync

Browser extensions - continued

- Ad blockers
 - Adblock
- Security
 - HTTPS everywhere
 - Ghostery
- Web development using CMS
 - lipsum

EMAIL efficiency

Email clients (MUA - mail user agent) is a program that allows user to access and manage emails, for e.g Zimbra.

Use **Filters** to manage / group emails:

1. Open Gmail.
2. Check the checkbox next to the email you want.
3. Click More.
4. Click Filter messages like these.
5. Enter your filter criteria.

Unsubscribe from unused subscriptions that keep bogging your email, for e.g. Starbucks

Security and Privacy

- HTTPS Everywhere
 - [chrome web store](#) → https everywhere
- Backups
 - Backup to an external hard drive
 - Online data backup
 - Flash drive
 - Cloud Storage
- Password
 - Don't use the same password for everything
 - Don't keep passwords saved in a file
 - Change passwords every so often (6 months)
 - Use password managers, they help with the things stated above

Miscellaneous

- PDF managers - print2pdf
- LifeHacker
- HowToGeek

Text Editors

- TextWrangler (can use SFTP for Mac)
- Sublime Text - free but not open-source
- Atom - great for its packages, can be used for pair programming
- Notepad ++
- Vim
- Nano
- Emacs

Windows softwares

- SFTP client:
 - Winscp
 - MobaXtern
- X-11 forwarding:
 - MobaXtern
- Linux/Bash Usability in Windows:
 - Cygwin (can be embedded into cmd)
 - Putty (ssh only tool)
 - Window's 10 bash shell

Linux Terminal - Basic commands

ls	List all contents in directory
cd	Change directory
view / vim	Open the file
grep	Search for pattern in file or standard input
mkdir	Make a directory
rm	Remove
cp	Copy
mv	Move
man	Displays the manual page for the command
cat / less / more	Ways to display contents of file

ssh and ssh keys

- When ssh-ing you “enter into” another machine
- For example ssh-ing into lovelace machines:
 - ssh earlham-user@home.cs.earlham.edu

To set up key (for lovelace machines):

- 1) Type the command into shell: `ssh-keygen -t rsa`
- 2) Enter file in which to save the key (`/home/demo/.ssh/id_rsa`)
- 3) Enter passphrase (empty for no passphrase)
- 4) `cat ~/.ssh/id_rsa.pub | ssh user@home.cs.earlham.edu "mkdir -p ~/.ssh && cat >> ~/.ssh/authorized_keys"`
- 5) Create a config file

[tutorial](#)

Vim / Vi

S (dd)	Delete line
u	Undo
i	Insert
I	Skip to the beginning of the line and enters the insert mode
A	Skip to the end of the line and enters insert mode
:set number	Numbers each line
6G	Moves you to line 6
:w	Write / Save
:q (q!)	Quit (Force)
:wq	Write and Quit

More on Vi/Vim

- Syntax on as default:
 - `$ vi(m) .vimrc`
 - `syntax on`
- Colorscheme:
 - `$ vi(m) .vimrc`
 - `colorscheme koehler`
 - Blue, default, desert, evening, morning, pablo, ron, slate, zellner, darkblue, delek, elflord, koehler, murphy, peachpuff, shine, torte

[colorscheme tutorial](#)

Git(hub/lab) overview

- Git is one of the many ways of version control, and is one of the most widely used, because
 - Connectivity no longer blocks the work.
- Github is one of the widely used web platform for git, just like gitlab, and is team-centric.
- Some of the softwares used by people who work with git
 - Source Tree
 - Git Kraken