🏠 / **General**

⭐ GENERAL

Helpful Tools

Central Tools and Services

Version Control System (mandatory)

Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency. We use TU-Braunschweig git and the PLRI git.

Literature Management System (mandatory)

Zotero is a free and open-source reference management software to manage bibliographic data. Features include web browser integration, online syncing, generation of in-text citations, footnotes, and bibliographies, an integrated PDF reader and note editor, as well as integration with Overleaf and Google Docs. Our group has its own group to share literature.

Online Latex Editor (mandatory)

We use Overleaf for collaborative cloud-based writing in LaTeX. Most of the lectures and exercises are stored here and its also useful to write papers together, since it comes with Zotero and Google drive integration.

OS-Agnostic Tools

Python IDE

Pycharm is an open source Python IDE. While there exists a free professional versions for students, you cannot use this due to licensing issues. Use only the Community Edition!

Typing assistant

Grammarly is a cloud-based typing assistant that reviews spelling, grammar, punctuation, clarity, engagement, and delivery mistakes in English language text. It also detects plagiarism.

Encryption

You should use VeraCrypt to encrypt your backup hard drive.

Backups

You can use rsync to create backups of your data. This is also possible on Windows, so no excuses! 😄

Password Manager

Use KeePassXC to manage your passwords.

Working with PDFs

The Foxit PDF Reader is available for all major OSes. Admittedly, the Windows and Mac versions are bit more up to date than the Linux version. Still, it's a very intuitive and powerful PDF annotation tool.

Linux-Specific Tools

Mac-Specific Tools

Battery Management

You can use AlDente for battery management. The free version is enough to allow setting an upper charge limit (in the long run increasing battery life), while the paid version has some more convenience features.

Productivity

Alfred is a very powerful replacement for Spotlight offering tons of features and possibilities to control your system from a very simple interface. It also provides a very convenient clipboard history (which is also available via separate tools, but why not use the one Alfred already has built-in). The free version is already very good, the paid version adds some very powerful features on top, such as workflows and automation, should you need this.

When you often use your Mac for giving presentation (we're in research after all), Amphetamine might be very useful for you. It makes it very easy to temporarily prevent your system from going to sleep or your screensaver from interrupting your presentation, should you stay on the same slide for too long 😉

"TRex is the easiest way to copy the uncopyable text from images, YouTube videos, Zoom calls and more. If you can see it - you can copy it." -- [1]

Security

There's a series of donation-ware security tools available at objective-see.org. Obviously, it's highly encouraged to use them.

Software Management

Even on a Mac you sometimes want to uninstall Apps completely and make sure they leave as little trace on your system as possible. This is where AppCleaner come in quite handy. Simply drag and drop the App into the AppCleaner window and AppCleaner will take care of the rest.

Homebrew gives you a terminal-based package manager similar to apt in Linux, providing easy access to many tools you might miss from other UNIX systems.

Misc

If your menu bar gets too cramped (e.g., because you followed the recommendation and installed all the security tools from objective-see.org 😉), HiddenBar might be your solution. It let's you meticulously define which item you want to see where and when in your menu bar.

Looking for a tiling window manage or keyboard-control of your windows on Mac? Then Rectangle is for you!

Windows-Specific Tools

Windows Subsystem Linux

Install Windows Subsystem Linux (WSL) on your Windows PC, it makes life easier and enables you to use tools like rsync / rsnapshot.

Miscellaneous

Better looking Wikipedia

Wikiwand software for a better looking Wikipedia.