



Lib4RI Training Series

Getting started with L^AT_EX

Trainers: Federico Cantini & Frank Hösl

31st October 2025

Contents

1	Software installation	2
1.1	Required software	2
1.2	Installing L ^A T _E X	2
1.2.1	GNU/Linux	2
1.2.2	Mac OS©	2
1.2.3	Windows©	2
1.3	Installing T _E Xstudio	3
1.3.1	GNU/Linux	3
1.3.2	Mac OS©	3
1.3.3	Windows©	3
1.4	Overleaf	3
2	Useful resources	4
2.1	General L ^A T _E X info, documentation and resources	4
2.2	T _E X distributions	4
2.3	GUIs	4
2.4	On-line editors/systems	4
2.5	More about bibliography and citations	5
2.6	Useful packages	5
2.7	Video tutorials	6
2.8	Collaborative documents writing with L ^A T _E X and Git	6

1 Software installation

1.1 Required software

A working L^AT_EX(<https://www.latex-project.org/>) installation is required to attend the course. Please follow the instructions for your operating system in section 1.2

The installation of a GUI is also recommended. T_EXstudio (<https://www.texstudio.org/>) is a GUI (Graphical User Interface) to the L^AT_EX system with editing, preview and other features. It is available for GNU/Linux, Mac OS X and Windows. To install it please follow the instructions in section 1.3

If, for any reason, the local installation is not an option, you can use the on-line service Overleaf: <https://overleaf.com/> (see section 1.4).

1.2 Installing L^AT_EX

1.2.1 GNU/Linux

Install T_EXLive from the repository of your distribution.

Alternatively:

1. Go to: <https://www.tug.org/texlive/acquire-netinstall.html> and download the `install-tl-unx.tar.gz` file.
2. Follow the installation instructions: <https://www.tug.org/texlive/quickinstall.html>.

1.2.2 Mac OS[©]

1. On macOS High Sierra or higher download the proper package (<https://miktex.org/download>) and follow the installation instructions (<https://miktex.org/howto/install-miktex-mac>).
2. On older versions of macOS install MikT_EX via the Homebrew package manager (<https://brew.sh/>):

```
brew tap miktex/miktex  
brew install miktex
```

Alternatively, the installer at 1) can be built from source following the instructions from <https://miktex.org/howto/build-mac> (this requires that *Xcode* is installed).

1.2.3 Windows[©]

1. Go to: <https://miktex.org/download> and download the Basic MiK_TE_X Installer (choose the 64- or 32-bit version depending on your system).

2. Run the downloaded file and follow the installation instructions: <https://miktex.org/howto/install-miktex>.

1.3 Installing T_EXstudio

1.3.1 GNU/Linux

Option 1: Install T_EXstudio from your distribution's repository.

Option 2: Download the suitable package for your system from <https://www.texstudio.org/#download> and install it.

1.3.2 Mac OS[©]

From <https://www.texstudio.org/#download> download the *dmg* file and run the application. (OS X 10.12+ is required).

1.3.3 Windows[©]

Option 1: From <https://www.texstudio.org/#download> download the suitable installer version, install and run the application. In case T_EXstudio does not appear in the list of the installed applications and in the application search, manually add here C:\Users\cantinfe\AppData\Roaming\Microsoft\Windows\Start Menu\Programs a shortcut to the executable file here
C:\Users\cantinfe\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\texstudio.exe

Option 2: Option 2: Download from the same page the *portable* version, unzip it and run the application.

1.4 Overleaf

To use Overleaf you can create a free account on the service website (<https://overleaf.com/>). Alternatively you can log in with your existing ORCID or Google credentials.

2 Useful resources

2.1 General L^AT_EX info, documentation and resources

- L^AT_EX Project homepage: <https://www.latex-project.org/>
- T_EX related material and software (including additional packages): <https://ctan.org/>
- The renowned “not so short” intro to LaTeX: <https://tobi.oetiker.ch/lshort/>
- The L^AT_EX wikibook, a comprehensive guide to LaTeX: <https://en.wikibooks.org/wiki/LaTeX>
- Learn L^AT_EX in 30 minutes (on Overleaf website): https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes
- T_EX Users Group: <https://www.tug.org/>
- T_EX stack exchange: <https://tex.stackexchange.com>
- A collection of templates: <https://www.latextemplates.com/>
- Another collection of templates: <https://www.overleaf.com/latex/templates>
- The Comprehensive L^AT_EX Symbol List <https://mirror.easynome.at/ctan/info/symbols/comprehensive/symbols-a4.pdf>
- A collection of L^AT_EX tutorials <https://latex-tutorial.com/>

2.2 T_EX distributions

- T_EX live: <https://www.tug.org/texlive/>
- MikT_EX: <https://miktex.org/>
- MacT_EX: <https://www.tug.org/mactex/>

2.3 GUIs

- T_EXstudio: <https://www.texstudio.org/>
- T_EXmaker: <https://www.xmlmath.net/texmaker/>
- Lyx: <https://www.lyx.org/>

2.4 On-line editors/systems

- Overleaf: <https://overleaf.com/>

2.5 More about bibliography and citations

- Getting started with Bib $\LaTeX$: https://www.overleaf.com/learn/latex/Articles/Getting_started_with_BibLaTeX
- Bibliography management with Bib $\LaTeX$: https://www.overleaf.com/learn/latex/Bibliography_management_with_biblatex
- Bib $\LaTeX$ citation styles: https://www.overleaf.com/learn/latex/Biblatex_citation_styles
- Getting started with Bib $\TeX$: https://www.overleaf.com/learn/latex/Bibliography_management_with_bibtex
- Using Bib $\TeX$: <https://ctan.math.illinois.edu/biblio/bibtex/base/btxdoc.pdf>
- Designing Bib $\TeX$ styles: <https://mirrors.rit.edu/CTAN/biblio/bibtex/base/btxhak.pdf>
- NatBib:
 - <https://gking.harvard.edu/files/natnotes2.pdf>
 - <https://ctan.math.utah.edu/ctan/tex-archive/macros/latex/contrib/natbib/natbib.pdf>
- Bib $\TeX$ style examples: <https://verbosus.com/bibtex-style-examples.html>
- Choosing a Bib $\TeX$ style: <https://www.reed.edu/cis/help/LaTeX/bibtexstyles.html>
- DOI to Bib $\TeX$ citation: <https://doi2bib.org/>

2.6 Useful packages

- babel – Multilingual support for $\LaTeX$, Lua $\LaTeX$, Xe $\LaTeX$, and Plain $\TeX$ <https://ctan.org/pkg/babel>
- graphicx – Enhanced support for graphics <https://ctan.org/pkg/graphicx>
- hyperref – Extensive support for hypertext in $\LaTeX$ <https://ctan.org/pkg/hyperref>
- amsmath – AMS mathematical facilities for $\LaTeX$ <https://ctan.org/pkg/amsmath>
- authblk – Support for footnote style author/affiliatio <https://ctan.org/pkg/authblk>
- Bib $\LaTeX$ – Sophisticated Bibliographies in $\LaTeX$ <https://ctan.org/pkg/biblatex>

- mhchem – Typeset chemical formulae/equations and H and P statements <https://ctan.org/pkg/mhchem>

2.7 Video tutorials

- [https://www.overleaf.com/learn/latex/LaTeX_video_tutorial_for_beginners_\(video_1\)](https://www.overleaf.com/learn/latex/LaTeX_video_tutorial_for_beginners_(video_1))

2.8 Collaborative documents writing with L^AT_EX and Git

- <https://www.overleaf.com/blog/collaborating-with-latex-and-git-2012-10-16>
- https://en.wikibooks.org/wiki/LaTeX/Collaborative_Writing_of_LaTeX_Documents
- <https://github.com/LKedward/latex-github-collab>