

## TUTORIAL

# LaTeX tutorial for the creation of academic-standard CVs or résumés

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## Contents

<b>1</b>	<b>Get Started</b>	<b>2</b>
1.1	Installation . . . . .	2
1.2	Download from GitHub . . . . .	3
1.3	Your First Document . . . . .	3
<b>2</b>	<b>Editing T<sub>E</sub>X Files</b>	<b>5</b>
2.1	Title Header . . . . .	5
2.2	Qualifications . . . . .	6
2.3	Work Experience . . . . .	7
2.4	Technical Skills . . . . .	8

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This work and the associated files `articleCV.cls` and `CVexample.tex` exist under the terms of the L<sup>A</sup>T<sub>E</sub>X Project Public License, which permits use, distribution and /or modification under the conditions of the license.

# 1 Get Started

Begin by following the instructions located in the GitHub repository at <https://github.com/Pedro-h-mattos/LaTeXCVTemplate>, to:

- Install a  $\text{\TeX}$  distribution
- Download a copy of this projects' files onto your local device
- Compile `CVexample.tex` to produce a PDF output

Those instructions are repeated here in more detail.

## 1.1 Installation

Information about downloading the appropriate software can be found by following the link: <https://www.latex-project.org/get/>.

### Step 1.

Install an appropriate  $\text{\TeX}$  distribution.

A  $\text{\TeX}$  distribution, such as MikTeX, TeXLive or MacTeX, is a necessary prerequisite for compiling  $\text{\TeX}$  files. These are free and easily available for download online.

### Step 2.

Install and configure your preferred text editor (e.g. TeXStudio or TeXWorks)

$\text{\TeX}$  files can be written using any editor and then compiled via the system shell. However for ease-of-use, it is recommended to install a dedicated platform for working with  $\text{\TeX}$  files.

Other code-editors (e.g. VScode) can be suitable, but may require configuration by installing some extensions.

### Step 3.

Alternatively, register an account at <https://www.overleaf.com/>

Overleaf is a cloud-based LaTeX editor which doesn't require any local installation. Integrated project sharing, bibliography management and templates make Overleaf popular with beginners. Although, some features are limited to premium users.

## 1.2 Download from GitHub

### Step 4.

Return to the GitHub repository, <https://github.com/Pedro-h-mattos/LaTeXCVTemplate>

After installing the necessary software, download the project files from the GitHub repository onto your local filesystem.

### Step 5.

Download the repository by selecting `<> Code` and then **Download ZIP**

You can download the entire repository as a .zip file or install the files individually by clicking on its name and then **Download raw file**.

### Step 6.

Unpackage the zip file into an appropriately-named folder (e.g. 'myresume')

## 1.3 Your First Document

Compiling your document now is a good test to see if your software was correctly installed. You can compile source code in the terminal interface with the command `pdflatex <filename>`.

However, it is generally easier to compile from within a  $\text{\TeX}$  editor.

### Step 7.

Rename the source file from `CVexample.tex` to `YourName_Position_CV.tex`

This will be the name of your compiled PDF document.

**Step 8.**

Open the source file `CVexample.tex` within your preferred text editor

**Step 9.**

Compile your document using the `pdfLaTeX` option

Take a moment to examine the output PDF document.

`CVexample.tex` is designed as a customisable template. The rest of the guide will help you fill it out, step-by-step.

## 2 Editing T<sub>E</sub>X Files

### Step 10.

Return to your source document `\CVexample.tex`

The class declaration, `\documentclass{articleCV}`, is analagous to loading a template for the document, which describes configuration and style settings.

`\begin{document}` and `\end{document}` contain the body of the document, including all the text that is output when the document is compiled.

### 2.1 Title Header

### Step 11.

Locate the title header within the source document

The following code constructs the title header:

```
\begin{centering}
  {\Huge John Smith \par}
  \vspace{0.5\baselineskip}
  132 My Street, London, England \par
  \vspace{0.5\baselineskip}
  E-mail: smithj@outlook.com \quad Telephone: (+00) 000-0000-0000 \par
\end{centering}
\vspace{\baselineskip}
```

We're only concerned with the text output of our document, so we will ignore special characters e.g. `{}` or commands (prefixed by `\`).

### Step 12.

Replace the name, address, email and telephone number with your own information

Then, recompile `CVexample.tex` and observe the changes made to your document.

Now, let's consider how the header is formatted.

- `\begin{centering}` and `\end{centering}` center the header on the page
- `\Huge` makes the font size huge
- `\vspace{0.5\baselineskip}` adds extra spacing between lines, denoted by `\par`
- Similarly, `\quad` adds horizontal space between elements on the same line

Enclosing `{\Huge John Smith \par}` in curly braces prevents the style elements from overlapping onto other lines.

## 2.2 Qualifications

### Step 13.

Locate the first section header `\section{Qualifications}`, within the source document

The source document contains three sections, `Qualifications`, `Experience` and `Skills`.

### Step 14.

Describe a recent qualification by rewriting each argument #1-4 given to the first `\tab` command

The `\tab` command creates a subheading, which is a page-width table with two columns and two rows, that are justified to either margin. Text on the first line is **boldface** and on the second is *smaller, italicized and sans-serif*.

Cells are given as inputs (#1-4), which can be null. For example:

```
\tab
{Bachelor's of Science in Biochemistry}{2022--2026} % #1 and #2
{Queen Mary University of London}{London, England} % #3 and #4
```

Outputs:

**BSc Biochemistry**  
*Queen Mary University of London*

**2022–2026**  
*London, England*

Pretty snazzy, eh?

**Step 15.**

Next, add a bullet point underneath your first subheading

```
\begin{itemize}
  \item
\end{itemize}
```

The environment created by `\begin{itemize}` and `\end{itemize}` creates a bulleted list and the command `\item`, followed by plain text, creates a bullet-point.

Putting it all together, the following code:

```
\tab
  {BSc Biochemistry}{2022--2026}
  {Queen Mary University of London}{London, England}
  \begin{itemize}
    \item Genes and Bioinformatics, Cell Biology and Development,
    ↪ Fundamentals of Organic Chemistry
  \end{itemize}
```

Creates the subheading:

**BSc Biochemistry****2022–2026***Queen Mary University of London**London, England*

- Genes and Bioinformatics, Cell Biology and Development, Fundamentals of Organic Chemistry

**Step 16.**

Repeat the previous steps to describe another qualification

## 2.3 Work Experience

**Step 17.**

Describe a recent position of employment, using the `\tab` command and bullet point(s)

Repeat the construction of a subheading, as before, to fill out your CV. Besides a formal work history, you may also choose to describe your internships, volunteer experience or personal projects.

## 2.4 Technical Skills

Consider another example subheading, with a slightly different style:

### Language Proficiencies

- English (native fluency), Spanish (working proficiency), Mandarin (conversational)

With only one argument it is better to use the command `\textbf{}`, than `\tab`, which would otherwise result in a too-large linebreak.

```
\textbf{Language Proficiencies}
\begin{itemize}
  \item English (native fluency), Spanish (working proficiency),
    ↪ Mandarin (conversational)
\end{itemize}
```

#### Step 18.

List the remainder your skill(s) using `\tab` or `\textbf` and bullet points

Finally, save your changes and then recompile `CVexample.tex`.