Getting Started with LaTeX

Parth Shimpi
pas201@cam.ac.uk

November 6, 2019

So you have signed up for the LaTeXworkshop. Great! Here is a basic introduction to what we will be doing, and what you need to do before the workshop.

1 What to expect

If you aren't aware yet, this is a one-hour workshop, split roughly equally into two sections on Git and LaTeX. Will you be an expert on either after this? No. Will you be one of those kids who types at 500 words per minute and makes notes in LaTeX with figures and tables in the lecture? Probably not. In fact, after over a year of using LaTeX, I still come across new features and commands every time I use LaTeX. And that is the beauty of this typesetting tool, it is extremely versatile and powerful.

By the end of this workshop, you will be able to create your own document in LaTeX, with mathematical symbols, text, lists and images. But more importantly, you will have overcome the barrier of starting to use this tool, after which adding anything you want- tables, diagrams, graphs (even coffee-stains!) to your document is just a Google search away.

2 What to bring

1. **Your laptop:** of course, important.

2. **An open mind and a desire to learn:** even more important. If you keep saying *"MS Word does the job"* (no it doesn't) then you'll never discover far better tools out there.

It would also be nice if you decided one of the two methods of using LaTeX and prepared your laptop accordingly:

1. **Online editors:** These are nice and light on your system, and I would recommend these if you have reliable internet most of the time. You don't have to install anything, and you will have the latest versions of the software available every time (although some need paid memberships to access all features.)

   If you go with this option, then you can try Overleaf, which has a nice free version. It boasts autocompile, which could be helpful for an absolute beginner who is more used to the what-you-see-is-what-you-get style of traditional word-processors. Do create your account, and play around on Overleaf if you wish before the workshop.

2. **TeXdistributions:** If you are more like me, you might want to have a reliable offline compiler on your device which you can access all the time. A *distribution* is a complete set of software which you need on your system in order to compile tex files and generate pdfs. The most common ones are MikTeX and TeXlive, and the websites contain detailed instructions on how to install either. (You just have to install one of the two.)

   After this, you can use your favourite text editor (Notepad, Notepad++, VS Code) (requires setting up) or LaTeX-specific code editors (TeXlive, TeXmaker) to write your code and generate pdfs- each comes with its own perks, such as side-by-side viewing of document and/or a symbol panel for easy access. I would recommend this if you are a more experienced coder and wish to use the same IDE for everything, or just want to use LaTeXoffline. This option is also completely free, and comes with all features unlocked. (You will have to periodically update your distribution though.)

Once you come with your preferred method of using LaTeXset up, we can start exploring the tool at the workshop!