

GEOPUG:Week 4

L^AT_EX and bibliographies

GEOPUGGER

BibTeX

BibTeX is the LaTeX tool for processing lists of references. You will notice the sample.bib file in the Week 4 folder. Hopefully you were able to create a file like this on your own. Note it's not in any format that you would find in an article, book or thesis. Instead this is the file you will refer to when asking LaTeX to insert a citation or create a bibliography in your document.

You can manage and view your .bib files in Notepad, Notepad++, gedit or wherever you manage and view .tex files. You may also download JabRef, an open-source interface that manages BibTeX files quite well. Try it out.

Notice that each entry in .bib starts with the category of media that that source falls under. So when you call on that reference, LaTeX knows what the formatting should be. Here are a list of examples.

- @article for a journal article
- @book for a book
- @incollection for a paper or report in a larger collection of related papers or reports
- @misc for a map, strat column, etc.
- inproceedings for a conference abstract
- @thesis for a thesis/dissertation

Just like figures, *.bib files need to be in the same directory as your .tex files. Also, you must add a line at the end of your tex file (but before 'enddocument') that specifies which .bib to look for. In our case the filename is sample.bib. See the second last line of this document. BibTeX writes to the .aux file and LaTeX looks to the .aux for directions. So be sure to keep .aux with .tex and .bib. Furthermore, your work goes much smoother if you use the 'Build and View' icon to run rather than 'Compile'

Some examples

See how each entry in sample.bib has a key listing? (Hint: the first entry's key listing is Roberts2011.) You can use this identifier instead of having to type out every citation you need. For example, unicorns are real (Roberts et al., 2011).

- There are different ways to insert a citation Roberts et al. (2011). 'cite' should, by default, give a number index instead of writing out the author and year.
- There are different ways to insert a citation Roberts et al. (2011). 'citet' writes out the author and year
- There are different ways to insert a citation (Roberts et al., 2011). 'citep' writes out the author and year AND puts it in parentheses.

Remember, these citations won't show up until you specify which .bib you want LaTeX looking at.

Here are two examples where you'd like your citation to say a little something extra.

Lots of folks study unicorns (Rowland and Garbeil, 2000, etc), but how many of them truly understand the significance of the unicorn horn's texture (Scott and Tanaka, 1986, Figure 2). Most recent findings have shown a unicorn's horn is utterly unique much like a zebra's stripes or human's fingerprint (Roberts et al., 2011; Rowland and Garbeil, 2000; Scott and Tanaka, 1986).

As you cite your sources, they are added to the bibliography at the end of your document, like magic, in alphabetical order too! If you want a reference included in the bibliography, but you didn't explicitly cite it in your text, do this:

References

- Roberts, K. S., Davies, R. J., Stewart, S. A., and Tingay, M. (2011). Structural controls on mud volcano vent distributions: examples from Azerbaijan and Lusi, east Java. *Journal of the Geological Society*, 168(4):1013–1030. doi:10.1144/0016-76492010-158.
- Rowland, S. K. and Garbeil, H. (2000). Slopes of oceanic basalt volcanoes. In P. J. Mouginis-Mark, et al., editor, *Remote Sensing of Active Volcanism, Geophys. Monogr. Ser.*, volume 116. AGU, Washington, D. C. doi:10.1029/GM116p0223.
- Sakimoto, S. E. H., Gregg, T. K. P., Hughes, S. S., and Chadwick, J. (2003). Re-Assessing Plains-style Volcanism on Mars. In A. L. Albee & H. H. Kieffer, editor, *Sixth International Conference on Mars*, page 3197.
- Scott, D. H. and Tanaka, K. L. (1986). Geologic map of the Western Equatorial region of Mars. USGS Miscellaneous Investigations Series Map I1802A.