Referencing support for LaTeX users

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Today:

What are LaTeX/BibTeX?
Why
Learning about LaTeX
How it works
Creation of BibTeX files/interfacing with reference management software
Support for students
Future plans
Discussion/questions
What are LaTeX/BibTeX

LaTeX – a phototypesetting system which produces high quality output and an ability to handle complex mathematical formulae etc

BibTeX – for bibliography generation based on storing references separately in BibTeX (.bib) files
Why?
Feedback

I use LaTeX – how do I cite and reference?

I use LaTeX – Refworks is no use to me
Learning about LaTeX

We learnt the minimum we could get away with!

**MOST USEFUL:**
https://en.wikibooks.org/wiki/LaTeX/Bibliography_Management

Online tutorials e.g. Overleaf

Teaching Fellows/students

Books

Forums

Training course (not much use)
Barriers

No one distribution of LaTeX (downloadable vs web-based) Guides needed to be relatively generic
We soon reached the limits of our understanding on LaTeX
We were entering Geeksville! Lots of forums where the answers would be unintelligible!
How it works

Manual input with formatting in Bibliography environment of individual document

Reference details stored in BibTeX file(s) without formatting, allowing re-use.
@article{RefWorks:1249,
  author={F. Birgersson and S. Finnveden and G. Robert},
  year={2004},
  title={Modelling turbulence-induced vibration of pipes with a spectral finite element method},
  journal={Journal of Sound and Vibration},
  volume={278},
  number={4-5},
  pages={749-72},
  abstract={The vibration of pipes is studied here using the Arnold-Warburton theory for thin shells and a simplified theory valid in a lower frequency regime. The vibrational response is described numerically with the spectral finite element method (SFEM), which uses the exact solutions of the equations of motion as basis functions. For turbulence excitation, the set of basis functions was extended to include particular solutions, which model a spatially distributed excitation. An efficient numerical solution to homogeneous random excitation is presented and the results compare favourably with wind tunnel measurements.},
  keywords={finite element analysis; pipe flow; pipes; spectral analysis; turbulence; vibrations},
  isbn={0022-460X},
  url={http://dx.doi.org/10.1016/j.jsv.2003.10.024}
}

@article{RefWorks:1248,
% A LaTeX document
\documentclass{article}
\usepackage{amsmath}
\usepackage{amssymb}
\usepackage{graphicx}
\begin{document}

Airplanes are by no means the only application of aerodynamics \cite{Refworks:1248}. The air flow over an automobile, the gas flow through the internal combustion engine powering an automobile, weather and storm prediction \cite{Refworks:1247}, the flow through a windmill, the production of thrust by gas turbine jet engines and rocket engines as stated by Lin \& Ebadian \cite{Refworks:1246}, and the movement of air through building heater and air-conditioning systems are just a few other examples of the application of aerodynamics \cite{Refworks:1249}.

\bibliographystyle{unsrt}
\bibliography{References}
\end{document}
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\usepackage{amsmath}
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\bibliographystyle{unsrt}
\bibliography{References}
\end{document}
NO Harvard format and NO URLs

+ Natbib

Harvard format, URLs included and more citing options

Natbib – going “one better”
Creation of BibTeX files/interfacing with reference management software
Reference Management software e.g. Refworks

Manual input, data capture from search tools

BibTeX file

LaTeX document

Reference management and LaTeX – data flow
Manual

Search tools such as databases, publisher websites and Google Scholar

Reference management software

Creation of BibTeX files
Creation of BibTeX files – e.g. Engineering Village

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<td>EndNote (RIS, Ref. Manager)</td>
<td>Current page view</td>
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<td>File name prefix: Engineering_Village _BIB_Date/Time.bib</td>
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</tbody>
</table>

Remove all Selected Records after Save (My PC only)
Login or Register to save to My Preferences
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Creation of BibTeX files – e.g. Web of Science
Creation of BibTeX files – journal websites
Creation of BibTeX files – Google Scholar
Creation of BibTeX files – e.g. Refworks
Why use reference management software?

Organize and re-use

Input/export of BibTeX files

All references/documents stored in one place

Editing/de-duplication
Issues

LaTeX special characters in automatically captured data

Inconsistency in data from many sources

Guides needed to be generic – to allow for different LaTeX distributions

Lots of ways to achieve the same result (forums)
Support for students

Library webpage – BibTeX for LaTeX
Lunchtime workshops
Basic information for LaTeX users provided in standard training
Enquiry service
Word bit no use to me!

LaTeX bit no use to me!
Future plans

IEEE format
Familiarisation with web-based LaTeX systems (Overleaf trial)
JabRef
Liaison with departments

Style files for Imperial College styles???
Discussion/questions