Tips for Using LaTeX

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August 28, 2006

Abstract

This document provides a continuously-updated list of assorted tips and lessons learned from my LaTeX experience.

1 General

- All mathematical operators should be non-italicized. That is, our code should produce $\max_x u(x)$, not $max_x\, u(x)$. You've probably noticed that WinEdt has available for you via the "Functions" tab a number of built in operators for your use. Operators not listed there should be defined in the preamble with a `DeclareMathOperator` command.
- Don't try to adjust vertical spacings using the `vspace` or `vskip` commands. The particular template you are using should be allowed to space objects as it sees fit. (The only exception to this rule is if you are creating your own template.)
- Include equations with the text for the same paragraph. Only include a blank line if there is a new paragraph
- Don't use the double quote character (") for *anything* other than BibTeX entries. For quotation purposes, always use (one or more) left quote characters (`) or right quote characters (').
- Have a style file with command shortcuts that you commonly use. (See the MS thesis or PhD dissertation styles for an example of this.)
- For practice, grab (or download) a mathematically intensive *IEEE Transactions on Communications* article and try to reproduce what you see.

2 Bibliographies

- Use BibTeX for your bibliography needs. It will save you *lots* of time in the end.

- When creating a BibTeX entry, be sure to test it in your document immediately to ensure proper formatting.
- Use the `IEEEtran` bibliography style so that your references are always format as in IEEE publications.
- Use the journal strings offered in the `IEEEtran` bibliography style and use the standard BibTeX three letter codes when entering months. (See `IEEEtran_bst_HOWTO.pdf` for details.)
- As with the journal strings, you may find it helpful to define strings for commonly-occurring conferences (INFOCOM, ICC, etc.). This can help in maintaining consistency in BibTeX entries.

3 Graphics

- Use the "PPT 2 eps" conversion method with drawn figures
- MATLAB figures should be directly exported to .eps format