My Example LaTeX Paper

Michael Weeks

May 2, 2008

Abstract

This is the abstract. You can use this file to start your own LaTeX file, and just delete the stuff you do not need. LaTeXis a lot like working with HTML: you can specify where text effects begin, and where they end.

1 Introduction

Here is the introduction. Since there is no blank line between these first 3 sentences, they are treated as one paragraph. Here is a vertical space (of 0.3 inches):

And here is a   horizontal space (of 0.3 inches).

A blank line means that the last paragraph is over, and it is time to start a new one.

You can have text in *italics* font, or in **bold** font, underlined, and even $\overline{\textit{overlined}}$.

Citing a reference: This is a book about VLSI [1]. Also, the references contain a good conference paper [2], and a good journal article [3].

What if you want to include a figure? Here is an example, figure 1, that is saved in encapsulated postscript format.

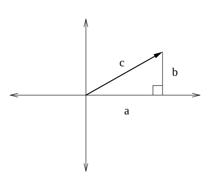

Figure 1: A complex number can be shown as a point or a vector

Skip a lot of space vertically.

2 Here is some Math

This is different from the previous section, section 1. This section gives some examples of Math.

Using superscript: 2^n

Using subscript: x_0

If you use a character, but LaTeX complains about it, try putting a back-slash before it. For example, f = xˆy uses the carat character. If you want to end a line, use 2 back-slashes. If you want the backslash character \ in your document, this can be done, too.

Here's an equation:

$$M^{\perp} = \{f \in V' : f(m) = 0 \text{ for all } m \in M\}.$$

Here's d2u/dx2 : (use the dollar sign before and after math stuff)
$\frac{d^2u}{dx^2}$
Here's another equation:

$$\lim_{x \to 0} \frac{3x^2 + 7x^3}{x^2 + 5x^4} = 3.$$

Here's a summation:

$$\sum_{k=1}^{n} k^2 = \frac{1}{2} n(n+1).$$

and an integral:

$$\int_a^b f(x)\, dx.$$

Here are some Greek letters: $\Delta\Psi\Phi$ and some lower case ones: $\delta\psi\phi\omega\pi\sigma\mu$.
For more info, see
http://www.maths.tcd.ie/˜dwilkins/LaTeXPrimer/

References

[1] Neil H. E. Weste and Kamran Eshraghian, *Principles of CMOS VLSI Design*, 2nd ed. Reading, MA: Addison-Wesley, 1993.

[2] R. A. Lincoln and K. Yao, "Efficient Systolic Kalman Filtering Design by Dependence Graph Mapping," in *VLSI Signal Processing, III*, IEEE Press, R. W. Brodersen and H. S. Moscovitz Eds., 1988, pp. 396–410.

[3] C. H. Bischof and G. M. Shroff, "On Updating Signal Subspaces," *IEEE Trans. on Signal Processing*, vol. 40, no. 1, pp. 96–105, Jan. 1992.