
The PracTeX Journal 2006-1–2007-2

The PracTeX Journal is an online publication of the TeX Users Group. Its web site is <http://tug.org/pracjourn>. All articles are available there.

The PracTeX Journal 2006-1, 2006-02-18

(Theme issue on fonts.)

LANCE CARNES, From the editor

FROM THE READERS, Feedback

ROBIN LAAKSO, Invitation to PracTeX'06

TAMYE RIGGS, Typographic opportunities

This introductory article describes the current market in digital type, offers some insights on the use of different typefaces, and offers some tips for everyone interested in typefaces, both novice and experienced users. Several on-line typeface resources are given, including type foundries, font development tools, and typographic organizations, conferences, and discussion groups.

WALTER SCHMIDT, Font selection in L^AT_EX
(Published in this issue.)

GERBEN C. TH. WIERDA, THOMAS A. SCHMITZ
and ADAM T. LINDSAY, Mac OS X fonts in pdfTeX

Installing a new font with your TeX installation can be a challenging task. This article documents an attempt to provide an automated solution for users running TeX on Apple's OS X. Using the fonts described here will only be possible for those who run this operating system; the way of making these fonts work with TeX should be of interest for all users. The article's level can be described as intermediate to advanced; it assumes some previous knowledge of TeX and fonts.

MIKE SPIVAK, The MathTime Professional Fonts:
Or, How I Wasted the Last Twenty Years of My
Life

I am a computer innocent who, through a series of historical accidents, ended up writing the `amstex` macro package, and a font design innocent who, through desperation for fonts that I was willing to use for my *Calculus* and *Differential Geometry* books, ended up designing the MathTime Professional fonts. It is a sobering reflection that these activities seem to have occupied a significant amount of my time during the last 20–25 years.

WILL ROBERTSON, An exploration of the Latin
Modern fonts
(An updated version appears in this issue.)

HELMER ASLAKSEN, Chinese \TeX : Using the CJK \LaTeX package, Unicode TrueType fonts and pdf \TeX under Windows

The goal of this article is to help users with no past experience with CJK (Chinese, Japanese, Korean) typesetting to include some pieces of CJK text in a \TeX document using the CJK \LaTeX package, TrueType fonts and pdf \TeX under Windows.

STEPHEN HARTKE, A survey of free math fonts for \TeX and \LaTeX

We survey free math fonts for \TeX and \LaTeX , with examples, instructions for using \LaTeX packages for changing fonts, and links to sources for the fonts and packages.

DAVID WALDEN, Travels in \TeX Land: Using the Lucida fonts

This paper describes buying, installing, and beginning to use the Lucida fonts. Then it describes some more exploration in the world of fonts in the context of the Lucida fonts.

THE EDITORS, Ask Nelly:

- Which fonts can be accessed from the \TeX Live distribution just using usepackage?
- What is the difference between fonts and typefaces?
- Which are the best fonts for typesetting math?

THE EDITORS, Distractions: Name-that-Font

The Prac \TeX Journal 2006-2, 2006-05-17

LANCE CARNES, From the editor

FROM THE READERS, Feedback

ROBIN LAAKSO, Invitation to Prac \TeX '06

THOMAS A. SCHMITZ, Presentations in Con \TeX t

\TeX is an excellent tool to produce PDF presentations. This paper will show you how to use Con \TeX t for writing presentations, and it will teach you to prepare a single source file that can output a presentation, a lecture manuscript, or a handout, if you adapt one single switch. The article is suitable for beginners in Con \TeX t but it should also have interesting things for more advanced users.

JAN HLAVACEK, Ipe—A graphics editor for \LaTeX

This article talks about the author's experiences with the Ipe graphics editor. This graphics tool, which runs on Windows, Linux, and Mac OS X, is well-suited to preparing graphics for \LaTeX documents. The main features of Ipe are described, as well as some advanced usage. A similar editor, VRR, is also described briefly.

STEPHEN J. EGLIN, Introduction to "A short example of how to use \LaTeX for scientific reports"

This short article summarises my reasons for writing a short \LaTeX document to act as a template for scientific reports. This document was used as a basis of practical sessions with Masters students who wished to learn to use \LaTeX for their reports. The outcome was quite successful in that many more students are now using \LaTeX for their reports, often using the document as a template.

D.V.L.K.D.P. VENUGOPAL, My experience with learning and teaching \LaTeX

The present article deals with the author's experience in learning \LaTeX independently and disseminating the knowledge acquired through a one week structured course to research scholars in a university system.

ANDY ROBERTS, In My Opinion: \LaTeX isn't for everyone but it could be for you (with responses)

This article by Andrew Roberts appeared last summer in OSNews.com. While the merits of \LaTeX Andy points out are familiar to most Prac \TeX Journal readers, the follow-on comments from readers pointed out some of \LaTeX 's (and \TeX 's) weaknesses.

DAVID WALDEN, Travels in \TeX Land: \LaTeX for productivity in book writing

My column in this issue summarizes why I use \LaTeX and gives examples of some productivity benefits of using \LaTeX to write books.

THE EDITORS, Ask Nelly:

- What is different when I click on the pdf \LaTeX rather than the \LaTeX icon in WinEdt?
- How do I convert a document to a publisher's requirements for double-spacing, line numbers, and figures on their own pages?
- How do I interrupt an enumerate environment and then continue it later in the document?

THE EDITORS, Distractions: Sudoku ABC; Winners of type quizzes

The Prac \TeX Journal 2006-3, 2006-08-15

DAVE WALDEN, From the editor

FROM THE READERS, Feedback

COMPILED BY DAVE WALDEN, Report on Prac \TeX '06

WILL ROBERTSON, Productivity with macros and packages

\LaTeX 's advantages in productivity, for me, are due to its ability to be customised. The first half

of this article discusses small macros written to ease document production, with some examples of how I use macros to save time and effort. Then, I briefly cover a selection of packages that provide a whole heap of functionality that other people have kindly implemented.

YURI ROBBERS, MARKUS KOHM and RASMUS PANK ROULUND, Replacing L^AT_EX 2_ε standard classes with KOMA-Script

KOMA is a complete replacement of the standard L^AT_EX 2_ε classes. It is aimed more at European typography, but is easily configurable. Some of KOMA's extensions and ways to configure document layout are also available in other document classes, such as the L^AT_EX 2_ε standard. This paper discusses just a few parts of KOMA, especially those that have to do with page layout and with writing letters.

PETER WILSON, The memoir class
(An updated version appears in this issue.)

DIDIER VERNA, L^AT_EX curricula vitae with the CurVe class

CurVe is a L^AT_EX 2_ε class for writing curricula vitae (cv). It provides a set of commands to create headers, rubrics, entries in these rubrics, etc. CurVe will then format your cv with a consistent layout while you can just concentrate on the contents. The layout of a CurVe cv is highly customizable. CurVe also has a very special feature known as the flavor mechanism: it is able to manage different "flavors" (versions) of your cv simultaneously. CurVe is distributed under the terms of the LPPL. This paper describes the features available in version 1.11.

JOE HOGG, ConT_EXt starters

This article presents two beginning projects using ConT_EXt. The first project is a letterhead that can be used for business and personal correspondence mailed in an envelope with an address pane. The second project is a four-page brochure done by the Botany Committee for Ape Awareness Day last November at the Los Angeles Zoo and Botanical Gardens.

D.V.L.K.D.P. VENUGOPAL, Creating pocket-size books using L^AT_EX

This article deals with creating pocket-sized books of A7 size using L^AT_EX in a quick and dirty method.

DAVID WALDEN, Travels in T_EX Land:
Experiences refining page layout for a book

In this column I describe my experience with taking final steps of turning a book manuscript into a published book.

D.V.L.K.D.P. VENUGOPAL, Book review:
Formatting Information — A beginner's introduction to typesetting with L^AT_EX, by Peter Flynn

The reviewer sees Peter Flynn's *Formatting Information* as a more practical introduction to L^AT_EX than many other popular introductions.

THE EDITORS, Ask Nelly:

- What are the differences among MiK_TE_X, ProT_EXt, and L^AT_EX?
- How do I add change bars?

THE EDITORS, Distractions: L^AT_EX wordplay — 3 crosswords; math font quiz answers

The PracT_EX Journal 2006-4, 2006-11-30

LANCE CARNES, From the editor

FROM THE READERS, Feedback

THE EDITORS, News from around

SINDHU SINGH, Our Introduction to L^AT_EX

This report presents the experiences of three participants in a L^AT_EX course given by D.V.L.K.D.P. Venugopal at Banaras Hindu University in India (see <http://tug.org/pracjourn/2006-2/venugopal>). This popular course, which runs for one week, was conducted three times in the year 2006. The three participants discuss their initial reaction to L^AT_EX, and compare it to other formatting systems.

JIM HEFFERON, What I wish I had ... when I was a lad: Using L^AT_EX resorces
(Published in *TUGboat* 28:1.)

PETER FLYNN, Rolling your own Document Class: Using L^AT_EX to keep away from the Dark Side
(Published in *TUGboat* 28:1.)

BORIS VEYTSMAN, Design of presentations: Notes on principles and T_EX implementation
(Published in *TUGboat* 28:1.)

JÜRGEN FENN, Managing citations and your bibliography with BIB_TE_X

This article gives a brief introduction to managing citations and to preparing a list of references with BIB_TE_X. Techniques for writing a bibliography file and its use in a document are presented for first-time BIB_TE_X users. Strategies and tools for simplifying work are also described. No attempt, however, is made to provide an in-depth introduction. The article concludes with a critical note on the future of BIB_TE_X and a list of references for further reading.

ELIZABETH DEARBORN, T_EX and medicine
(Published in *TUGboat* 28:1.)

BORIS VEYTSMAN and LEILA AKHMADEEVA,
Drawing medical pedigree trees with $\text{T}_{\text{E}}\text{X}$ and
 PSTricks
(Published in *TUGboat* 28:1.)

PAUL BLAGA, Using $\text{X}_{\text{Y}}\text{-pic}$

This is the first of two papers aiming to describe the use of the facilities of the package $\text{X}_{\text{Y}}\text{-pic}$ for constructing commutative diagrams. We tried to use in a systematic way the “learning by examples” approach, without entering into the details of different constructions or trying to describe in an exhaustive way all the possibilities. The final goal is to provide the reader with enough knowledge to be able to construct by himself complicated diagrams. This first paper describes the basic possibilities of $\text{X}_{\text{Y}}\text{-pic}$, which are provided by the kernel of the associated language, but it also explores many of the opportunities provided by the extension arrow.

FEDERICO GARCIA, Capabilities of PDF
interactivity
(An updated version appeared in *TUGboat* 28:1.)

TROY HENDERSON, A beginner’s guide to
MetaPost for creating high-quality graphics
(Published in *TUGboat* 28:1.)

ADITYA MAHAJAN, Creating homework
assignments using $\text{ConT}_{\text{E}}\text{Xt}$

This article shows how to create a $\text{ConT}_{\text{E}}\text{Xt}$ environment file to typeset homework assignments and their solutions. The same source file can be used to generate two versions: without and with the solutions.

LARS MADSEN, Avoid eqnarray !

Whenever the eqnarray environment appears in a question or an example of a problem on the `comp.text.tex` newsgroup or the `texhax` mailing list there is a good chance that someone will tell the poster not to use eqnarray . This article will provide some examples of why many of us consider eqnarray to be harmful and why it should not be used.

DAVID WALDEN, Travels in $\text{T}_{\text{E}}\text{X}$ Land: Using your
favorite editor with $\text{T}_{\text{E}}\text{X}$

In this column in each issue Dave Walden muses on his wanderings around the $\text{T}_{\text{E}}\text{X}$ world. In this column he is joined in his meandering by Yuri Robbers. Walden discusses the benefits of the fact that one can use the editor of one’s choice with $\text{T}_{\text{E}}\text{X}$ and the various system built on top of $\text{T}_{\text{E}}\text{X}$, and Robbers lists a number of editors that are optionally available.

DIMITRIOS FILIPPOU, Book review: A. Syropoulos
et al., *Digital Typography Using $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$*

The book *Digital Typography Using $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$* was published by Springer-Verlag in 2002, but has been mostly ignored by the $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$ community. However, Syropoulos and his co-authors have put lots of effort in creating a very good guide for the novice and the aspiring $\text{T}_{\text{E}}\text{X}$ nician. Despite some objections on how the book is structured, it can be said that *Digital Typography Using $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$* is a very good, if not excellent, everyday guide for producing beautiful documents.

THE EDITORS, Distractions: Two $\text{T}_{\text{E}}\text{X}$ -themed
crossword puzzles

The Prac $\text{T}_{\text{E}}\text{X}$ Journal 2007-1, 2007-02-20

YURI ROBBERS, From the editor

FROM THE READERS, Feedback

THE EDITORS, News from around

CLAUDIO BECCARI, Graphics in $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$

This tutorial describes some facilities offered by $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$ and its extension packages for producing line art graphics directly in the source document. Some of these facilities are standalone, in the sense that they do not require functionalities of external programs, while others rely on external programs.

ANDREW MERTZ and WILLIAM SLOUGH, Graphics
with PGF and TikZ
(Published in *TUGboat* 28:1.)

DIRK BAECHLE, Square concepts

The following text contains some basic chess concepts and advice, presented in the form of tasks. It was prepared [...] using the program `ChessTask`, and is aimed at hobby players of any strength. The given positions are all taken from my own games for the chess club SK Soltau, so they are not constructed examples but actually happened. While the tasks themselves are kept rather terse, I try to elaborate things a bit further when I unveil the correct moves at the end of the article. So even if you did not find the solution in first place, you can hopefully learn from the additional information.

YURI ROBBERS and ANNEMARIE SKJOLD,
Creating book covers with PSTricks

The title and the cover of the book are the very first impressions a potential reader is likely to get from a book. It is therefore of utmost importance to make sure these impressions are good ones. This paper will give some general notes on cover design,

and some specific notes on implementing such designs using PSTricks.

PAUL BLAGA, Commutative diagrams with \Xy-pic — II. Frames and matrices

This is the second article dedicated, essentially, to the use of \Xy-pic for constructing commutative diagrams. By using the same kind of approach as in the first part, we focus now on frames, matrices and other extensions of the kernel language.

MANJUSHA S. JOSHI, Create trees and figures in graph theory with PSTricks

Drawing trees and figures in the mathematical area of graph theory is a requirement for researchers and teachers. This includes loops, arcs, nodes, and weights for edges. This article aims to get started with PSTricks by keeping two commands in mind, viz. `pstree` and `psmatrix`. Using the most useful options of these commands the reader can draw tree diagrams, loops, node labels, and add weights to edges. Once the diagrams are completed they can be added to a \TeX file. With a little working knowledge about drawing figures in graph theory the reader can then produce his or her own.

LAPO FILIPPO MORI, \LaTeX pedia: The future of \LaTeX documentation

Software documentation is a very important success factor for open source software because it bolsters its diffusion. People who start learning \LaTeX and even intermediate users often complain about \LaTeX documentation: it is hard to find an updated, complete and well structured resource. This article evaluates advantages and disadvantages of the different sorts of resources for \LaTeX documentation available and proposes a new kind of documentation source: a free-content, web-based encyclopedia, \LaTeX pedia.

LAPO FILIPPO MORI, Tables in $\text{\LaTeX} 2_{\epsilon}$: Packages and methods

This article aims to provide the tools to correctly create tables in $\text{\LaTeX} 2_{\epsilon}$. This objective is pursued analyzing the typical problems that users find creating tables and possible solutions; particular emphasis is on the packages to be used. Examples are given for each case.

ENRICO GREGORIO, Babel, how to enjoy writing in different languages
(Published in this issue.)

JIN-HWAN CHO, Hacking DVI files
(Published in this issue.)

BOB NEVELN and BOB ALPS, Writing and checking complete proofs in \TeX
(Published in *TUGboat* 28:1.)

DAVID WALDEN, Travels in \TeX Land: The post-typesetting phase of producing a book

In this column I give a final report on the book project I last discussed in TPJ issue 2006-3, discuss “self-publishing” at some length, and mention some of my other recent activities in \TeX Land.

S. PARTHASARATHY, The “hacking for learning” paradigm in \LaTeX — Some thoughts by a long-time \LaTeX user

This article argues a case for making hacking an accepted way of learning. It uses the example of \LaTeX to show why hacking is not so bad as it is made out to be. It also gives some warnings on the downside of hacking-for-learning.

THE EDITORS, Ask Nelly: How do I create European style spacing within numbers?

THE EDITORS, Distractions: Some chess problems created in \LaTeX

The Prac \TeX Journal 2007-2, 2007-06-10

PAUL BLAGA, From the editor

FROM THE READERS, Feedback

THE EDITORS, News from around

PAUL BLAGA, Prac \TeX Journal: Making an electronic journal with web tools, wiki, and version control

This paper describes how an issue of TPJ is made up, and focuses on the software tools used. The tools used are the wiki, the subversion version control system, and Perl scripts. One of the goals of TPJ, and the reason for using these tools, is to create an environment where a small team of volunteers can put together an online journal with a minimum of time and work.

YURI ROBBERS, PDFpages for editors and publishers

There are many ways in which the PDFpages package by Andreas Matthias can be helpful to editors. An obvious one is collating several papers into one. This paper will describe a few of the many ways in which PDFpages can make life easy for the editor and publisher.

FEDERICO GARCIA, \LaTeX and the different bibliography styles
(Published in this issue.)

S. PARTHASARATHY, Demystifying L^AT_EX bibliographies

In this essay, we will try to explore and explain the vexing problem of including bibliographic references in L^AT_EX documents (reports, papers, theses, etc.). There is a plethora of literature on this subject. Unfortunately, these materials are focused on L^AT_EX's experts, and driven to a developer-level point of view. This current paper will examine bibliographies from a common user's point of view, trying to pass by only the essentials of this very vast and involved bibliographic topic. The author hopes that this paper will make L^AT_EX enjoyable for more people.

DAVID WALDEN, Travels in T_EX Land: Trying ConT_EXt

In this column I focus on my initial efforts to learn and use ConT_EXt.

THE EDITORS, Ask Nelly:

- How do I create footnotes to tables without developing an ulcer in the process?
- What is a good way to create subfigures within one float?
- How do I typeset a critical edition?

THE EDITORS, Distractions — From Shakespeare, with Love

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