



Seminar Series on Introduction to Research

Document Preparation Using $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}2_{\epsilon}$

Nauman

recluze@gmail.com

<http://csrdu.org/nauman>

FAST National University of Computer and Emerging Sciences (FAST-NU)
Peshawar Campus

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OPTIONAL TITLE FOR MY SLIDE I

- ▶ Introduction to L^AT_EX
- ▶ Why use it (or whats wrong with MS-Word)
- ▶ Terminology
- ▶ Getting started
 - ▶ Installing the software
 - ▶ Setting up the preferences
- ▶ Document structure
 - ▶ Setting the document class
 - ▶ Sections, subsections and formatting
 - ▶ Figures and Tables

OPTIONAL TITLE FOR MY SLIDE II

- ▶ Using packages (or whats with this undefined control sequence!)
- ▶ Typesetting Math/Equations
- ▶ Bibliographies (and how not to have headaches working with them)
- ▶ Advanced topics
- ▶ Setting up algorithms
- ▶ Code/program/policies/output formatting
- ▶ Must-see documents

INTRODUCTION TO L^AT_EX

- ▶ Based on T_EX
- ▶ Pronounced leh-tek (k being the sound of χ)
- ▶ Takes in LaTeX source and generates a number of outputs (dvi, html, rtf, pdf, ps)
- ▶ The output is concerned with placing boxes around the page
- ▶ Boxes are combined to form other boxes
- ▶ Placed using fixed or elastic widths and distances

INTRODUCTION (CONTD.)

- ▶ What's wrong with MS-Word?
- ▶ Lack of control
- ▶ Have to focus on content and presentation at the same time
- ▶ Too much effort required to format for specific conferences/journals
- ▶ Too much effort to change from one format to another
- ▶ Difficult to manage versions
- ▶ Difficult to manage references (even with EndNote)

INTRODUCTION (CONTD.)

- ▶ Whats wrong with LaTeX?
- ▶ You need to learn how to use it!
- ▶ Its not completely intuitive (for some)

TERMINOLOGY

- ▶ Document (the output)
- ▶ Document Class (the main type defining the doc)
- ▶ Package (a file encapsulating commands for a specific purpose)
- ▶ .sty (style files)
- ▶ .cls (document class files)
- ▶ FNDB (filename database)
- ▶ update (file/repository/meta information)

MUST SEE DOCUMENTS

- ▶ “A Not So Short Introduction to LaTeX”
- ▶ “The LaTeX Comprehensive Symbol List”

GETTING STARTED

- ▶ To work with LaTeX, you need:
 - ▶ an editor (TeXnicCenter, Kile, WinEdt, LED)
 - ▶ a compiler (MikTeX, TeXLive, tetex)
- ▶ Enough talk. Lets get started!

DEMO

- ▶ Installing software
- ▶ Creating your first document
- ▶ Getting the required packages
- ▶ Creating your second document (an ACM format paper)
- ▶ Creating your third document (a Springer format paper)
- ▶ Algorithms
- ▶ Cool output boxes with line numbers!