

# “Hands on” L<sup>A</sup>T<sub>E</sub>X is not for me Examples

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## Abstract

The purpose of this document is to provide some insight on how L<sup>A</sup>T<sub>E</sub>X works.

## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Example of a Section Heading</b>	<b>2</b>
2.1	Example of a Sub-Section Heading . . . . .	2
2.1.1	Example of a Sub-Sub-Section Heading . . . . .	2
<b>3</b>	<b>Numbering and Bulleting</b>	<b>2</b>
<b>4</b>	<b>Figure with Caption</b>	<b>3</b>
<b>5</b>	<b>Cross-Referencing</b>	<b>4</b>
<b>6</b>	<b>Citations</b>	<b>4</b>

## List of Figures

1	Caption of this very figure. . . . .	3
---	--------------------------------------	---

## List of Tables

1	Simple Table with Caption . . . . .	3
---	-------------------------------------	---

# 1 Introduction

This document was constructed “on-the fly” during a talk about L<sup>A</sup>T<sub>E</sub>X.

## 2 Example of a Section Heading

Text included in this section. Sub-section

### 2.1 Example of a Sub-Section Heading

Text included in this sub-section. Sub-sub-section

#### 2.1.1 Example of a Sub-Sub-Section Heading

Text included in this sub-sub-section. Paragraph

**Example of a Paragraph Heading** Text of paragraph. SubParagraph (do not mention this)

Inserting a numbered equation or mathematical expression is simple:

$$P(X = x) = \frac{\alpha x_m}{x^{\alpha+1}}, \alpha > 0, x \geq x_m > 0. \quad (1)$$

Inserting an inline mathematical expression is done by defining the expression within the text using `$expression$`. Example:

The Pareto probability density function is given by  $P(X = x) = \frac{\alpha x_m}{x^{\alpha+1}}$ , where  $\alpha > 0$  and  $x \geq x_m > 0$ .

## 3 Numbering and Bulleting

Buy the following stuff:

- Fruit;
- Tuna;
- Cerveja...

The following three items are obligatory:

1. Vodka;
2. Xixa;
3. Cocaine.

Lists are created using the following environments:

- This is the first item;
- This is the other item;

+ This is the first item;

+ This is the other item;

List environments may be cascaded:

- The following sub-items are numbered:
  1. This is the first item;
  2. This is the other item;
- This is the other item;

## 4 Figure with Caption

This section only contains a figure.

### Example 6 – Figure with Caption

```
\section{Figure with Caption}
\label{secFig}

This section only contains a figure.

\begin{figure}[!ht]
  % Requires \usepackage{graphicx}
  \centering
  \label{figExample}

  \includegraphics[width=0.85\textwidth]{fig1.pdf}\\

  \caption{Caption of this very figure.}
\end{figure}
```

Figure 1: Caption of this very figure.

1	2	3
4	5	6
7	8	9

Another table...

Table 1: Simple Table with Caption

1	2	3
4	5	6

## 5 Cross-Referencing

I hereby state that expression (1), included in subsection 2.1.1, defines the probability density function of the Pareto distribution.

## 6 Citations

At this point of the presentation, I would like to bring your attention to the citation system and to paper [1, 2, 3]. You can even cite [1] in the captions of the figures or tables without any problems.

## References

- [1] Jan W. Kantelhardt, Stephan A. Zschiegner, and Eva Koscielny-Bunde. Multifractal Detrended Fluctuation Analysis of Nonstationary Time Series. *Physica A: Statistical Mechanics and its Applications*, 316:87–114, December 2002.
- [2] Richard Lathrop and David L. Peterson. Identifying Structural Self - Similarity in Mountainous Landscapes. *Landscape Ecology*, 6(4):233–238, 1992.
- [3] Nataša B. Pavlović and Adolfo V. T. Cartaxo. Influence of tight optical filtering on long-haul transmission performance of several advanced signaling formats. *J. Lightwave Technol.*, 26(10):1339–1348, 2008.