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A great algorithm of linear algebra
Linear Algebra final project report

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Abstract

We will discuss a great algorithm of linear algebra described in [1]. We implemented it [2] and developed a useful Web application LAgorithm

1 Introduction

Your introduction goes here! Some examples of commonly used commands and features are listed below, to help you get started.

If you have a question, please use the support box in the bottom right of the screen to get in touch.

2 Some LaTeX Examples

2.1 Sections

Use section and subsection commands to organize your document. LaTeX handles all the formatting and numbering automatically. Use ref and label commands for cross-references.

2.2 Comments

Comments can be added to the margins of the document using the todo command, as shown in the example on the right. You can also add inline comments too:

> This is an inline comment.

Here's a comment in the margin!

2.3 Tables and Figures

Use the table and tabular commands for basic tables — see Table 1, for example. You can upload a figure (JPEG, PNG or PDF) using the files menu. To include it in your document, use the includegraphics command as in the code for Figure 1 below.

Figure 1: This is a figure caption.

Item	Quantity
Widgets	42
Gadgets	13

Table 1: An example table.

2.4 Mathematics

LaTeX is great at typesetting mathematics. Let $X_1, X_2, \ldots, X_n$ be a sequence of independent and identically distributed random variables with $\mathrm{E}[X_i] = \mu$ and $\mathrm{Var}[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \cdots + X_n}{n} = \frac{1}{n}\sum_i^n X_i$$

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.

2.5 Lists

You can make lists with automatic numbering ...

1. Like this,

2. and like this.

... or bullet points ...

- Like this,

- and like this.

We hope you find writeLaTeX useful, and please let us know if you have any feedback using the help menu above.

3 Pseudocode

Data: this text
Result: how to write algorithm with LaTeX2e
initialization;
while *not at end of this document* **do**
  read current;
  if *understand* **then**
    go to next section;
    current section becomes this one;
  else
    go back to the beginning of current section;
  end
end

Algorithm 1: How to write algorithms

4 Conclusions

In this project, we tested the great algorithm and suggested an improvement.

A Useful auxiliary facts

References

[1] Gilbert Strang, *Introduction to Linear Algebra*, 5th Edition, Wellesley–Cambridge Press, 2016.

[2] `http://github.com/linear-algebra`