ElegantPaper: An Elegant LaTeX Template for Working Papers

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ElegantLaTeX Program

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Abstract

This paper illustrates the usage of the ElegantPaper template, which is designed for writing a working paper. This template is based on the standard LaTeX article class. The goal of this template is to make the writing process easier and more comfortable. You can get rid of all the worries about the format. Just enjoy it! If you have any questions, suggestions or bug reports, you can visit ElegantPaper/issues. Looking for other templates designed by ElegantLaTeX Group? Please visit: https://github.com/ElegantLaTeX.

Keywords: ElegantLaTeX, Working Paper, Template

1 Introduction

This template is based on the standard LaTeX article class, which means you can pass the arguments of article class to it (`a4paper`, `12pt` and etc.). It supports different engines, You can choose either `PDFLaTeX` or `XeLaTeX`.

1.1 Global Options

I defined one option named `lang`, this option has two alternative values, `lang=en` (default) or `lang=cn`. `lang=cn` will make the caption of figure/table, abstract name, refname etc. Chinese, while `lang=en` will keep all these stuff English, as the default article class sets. You can use this option as

```
\documentclass[lang=en]{elegantpaper}
\documentclass{en}{elegantpaper} % both ok
```

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*Thanks Peiyi Yao for good suggestions.

1.2 Font Settings

1.2.1 Compile with `PDFLaTeX`

If you choose `PDFLaTeX` to process your paper, the default article font computer modern has changed to `newtx` series, and the default font size is set to `11pt`. The fonts are settings with:

- `newtxtext` package for text fonts, similar to times new roman font.
- `newtxmath` package for math fonts, close to `times` package.
- `FiraMono` package for typewriter fonts, with option `scale=0.8`.
- `ctex` package for Chinese fonts, with option `scheme=plain`.

1.2.2 Compile with `XeLaTeX`

If you choose `XeLaTeX` to process your paper, I use `fontspec` package and `xeCJK` package. I used fonts available in Windows, if you are using Linux or Mac OS, please substitute these fonts with that of your system. The font setting part

```
\RequirePackage{fontenc}
\RequirePackage[no-math]{fontspec}
\setmainfont{Times New Roman}[NFSSFamily=ntxtlf]
\setsansfont{Arial}
%\setmonofont[Scale=0.9]{Courier New}
\RequirePackage{xeCJK}
\RequirePackage{xunicode}
\setCJKmainfont[BoldFont={SimHei},ItalicFont={KaiTi}]{SimSun}
\setCJKsansfont[BoldFont={SimHei},ItalicFont={KaiTi}]{KaiTi}
\setCJKmonofont[BoldFont={SimHei},ItalicFont={KaiTi},Scale=0.9]{Microsoft YaHei}
\XeTeXlinebreaklocale "zh"
\XeTeXlinebreakskip = 0pt plus 1pt minus 0.1pt
\RequirePackage{newtxmath}
```

1.2.3 Other Settings

These packages operate perfectly but are inappropriate for big operators, for example `\sum` and `\prod`, thus, I change these operators back to computer modern font. Equation (1) shows the effects of these fonts:

$$(a + 3b)^n = \sum_{k=0}^{n} C_n^k a^{n-k} (3b)^k \tag{1}$$

The `\linespread` (controls line spacing) is set to 1.3, and I use `microtype` to improve the font justification. `type1cm` package is used to remove the font shape and font size warning messages.

1.3 Custom Commands

I don't change any default command or environment, which means you can use all the basic LaTeX commands and environments as before. Besides, I define 3 commands

1. `\email`: create the hyperlink to email address.
2. `\figref`: same usage as `\ref`, but start with label text **<Figure n>**.
3. `\tabref`: same usage as `\ref`, but start with label text **<Table n>**.
4. `\keywords`: create the keywords in the abstract section.

1.4 List Environments

You can use `itemize`, `enumerate`, or `description` environment as below

```
\begin{itemize}
    \item Routing and resource discovery;
    \item Resilient and scalable networks;
    \item Distributed storage and search.
\end{itemize}
```

- Routing and resource discovery;
- Resilient and scalable computer networks;
- Distributed storage and search.

1.5 Table

I strongly recommend you to use the `booktabs` package in your paper. It adds three commands to make the table prettier, ie. `\toprule`, `\midrule` and `\bottomrule`. **Table 1** is an example.

```
\begin{table}[htbp]
  \small
  \centering
  \caption{Auto MPG and Price \label{tab:reg}}
    \begin{tabular}{lcc}
    \toprule
                    &       (1)       &       (2)        \\
    \midrule
    mpg             &    -238.90***   &     -49.51       \\
                    &     (53.08)     &     (86.16)      \\
    weight          &                 &     1.75***      \\
                    &                 &     (0.641)      \\
    constant        &    11,253***    &     1,946        \\
                    &     (1,171)     &     (3,597)      \\
    obs             &       74        &      74          \\
    $R^2$           &     0.220       &     0.293        \\
    \bottomrule
    \multicolumn{3}{l}{\scriptsize Standard errors in parentheses} \\
    \multicolumn{3}{l}{\scriptsize *** p<0.01, ** p<0.05, * p<0.1} \\
    \end{tabular}%
\end{table}%
```

Table 1: Auto MPG and Price

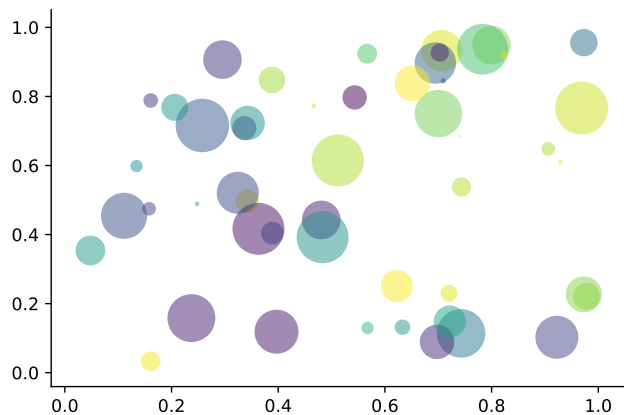|	(1)	(2)
mpg	-238.90***	-49.51
	(53.08)	(86.16)
weight		1.75***
		(0.641)
constant	11,253***	1,946
	(1,171)	(3,597)
obs	74	74
R^2	0.220	0.293

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

1.6 Graphics

To include a graphic, you can use figure environment as usual. **Figure 1** shows the effect. You can put all your images in the sub directories (./image/, ./img/, ./figure/, ./fig/) of your current working directory.

```
\begin{figure}[htbp]
  \centering
  \includegraphics[width=0.6\textwidth]{scatter.pdf}
  \caption{Scatter Plot Example \label{fig:scatter}}
\end{figure}
```


Figure 1: Scatter Plot Example

1.7 Bibliography

This template uses BibTEX to generate the bibliography, the default bibliography style is aer. Let's take a glance at the citation effect, Chen et al. (2018) use data from a major peer-to-peer lending marketplace in China to study whether female and male investors evaluate loan performance differently.

If you want to use BibTEX, you must create a file named wpref.bib, and add bib items (from Google Scholar, Mendeley, EndNote, and etc.) to wpref.bib file, and cite the bibkey in the tex file. The BibTEX will automatically generate the bibliography for you for the reference you cited. If you want to add some noncited reference to the bibliography, you can use

```
\nocite{EINAV2010, Havrylchyk2018}
```

2 A Minimal Example

In this section, we give a simple example using this template.

```
\documentclass[lang=en]{elegantpaper}

% title information
\title{A Working Paper Example}
\author{ddswhu}
\institute{Elegant\LaTeX{} Group}
\version{1.00}
\date{\today}

\begin{document}

\maketitle

\begin{abstract}
Your abstract goes here.
\keywords{keyword1, keyword2}
\end{abstract}

\section{Introduction}
The content of introduction section.

\section{Conclusion}
The content of conclusion section.

% include the noncited reference
\nocite{ref1, ref2}
\bibliography{wpref}
\end{document}
```

References

Chen, Jia, Jiajun Jiang, and Yu jane Liu, "Financial Literacy and Gender Difference in Loan Performance," *Journal of Empirical Finance*, 2018, *48* (71673007), 307–320.

Einav, Liran and Amy Finkelstein Mark R. Cullen, "Estimating Welfare in Insurance Markets Using Variation in Prices," *Quarterly Journal of Economics*, 2010, *CXXV* (August), 877–921.

Havrylchyk, Olena and Marianne Verdier, "The Financial Intermediation Role of the P2P Lending Platforms," *Comparative Economic Studies*, 2018, *60* (1), 115–130.