

Sky-camera based Cloud Movement Prediction and Sunlight Forecast

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Last update: October 21, 2019

Abstract

This paper illustrates the usage of the ElegantPaper template, which is designed for writing working paper. This template is based on the standard L^AT_EX 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 format. Just enjoy it, if you have any questions or suggestions, please contact me at: ddswhu@outlook.com.

1 Introduction

This template is based on the standard L^AT_EX article class, which means you can pass the arguments of article class to it (a4paper, 12pt and etc.).

1.1 Font Settings

I change the default article font computer modern to newtx series, and the default font size is set to 11pt.

- newtxtext package for text font, similar to times new roman font.
- newtxmath package for math font, close to times and mtpro2 packages.
- newtxtt package for typewriter font, with option `scale = 0.8`.

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:

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

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.

1.2 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{#1}`: create the hyperlink to email address.
2. `\figref{#1}`: same usage as `\ref{#1}`, but start with label text **<Figure n>**.
3. `\tabref{#1}`: same usage as `\ref{#1}`, but start with label text **<Table n>**.

1.3 List Environments

When you are using `itemize`, `enumerate`, or `description` environment, please add the `noitemsep` option to these environments. For example,

```
\begin{itemize}[noitemsep]
  \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.

1.4 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`. Here is an example.

Table 1: Regression Result Example

	(1)	(2)
	price	price
mpg	-238.9*** (53.08)	-49.51 (86.16)
weight		1.747*** (0.641)
constant	11,253*** (1,171)	1,946 (3,597)
observations	74	74
R-squared	0.220	0.293

Standard errors in parentheses

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

1.5 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}[!ht]
  \centering
  \includegraphics[width=0.6\textwidth]{mpg.png}
  \caption{The Relationship between MPG and Weight\label{fig:mpg}}
\end{figure}
```

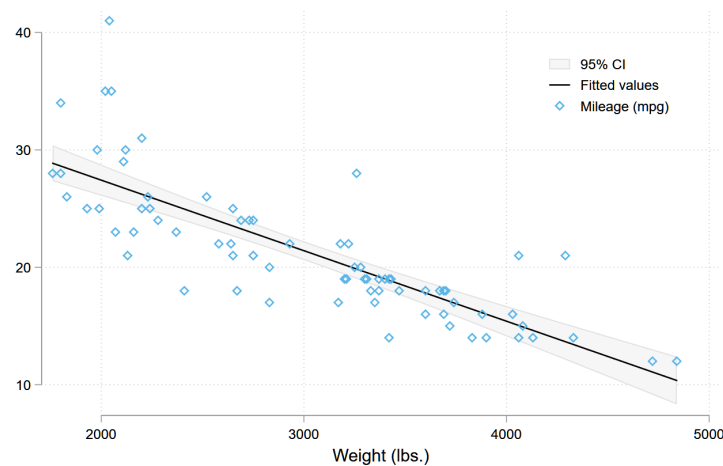


Figure 1: The Relationship between MPG and Weight

1.6 Bibliography

This template uses Bib \TeX to generate the bibliography, the default bibliography style is aer. **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. You can add bib items (from Google Scholar, Mendeley, EndNote, and etc.) to `wp_ref.bib` file, and cite the bibkey in the `tex` file.

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.