

A Translation Template for Huazhong University of Science and Technology: the husttrans class *

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Contents

I	Introduction	3
II	使用说明	4
1	使用必要条件	4
2	安装	4
2.1	安装到本地	4
2.2	免安装使用	5
3	基本用法	5
3.1	基本字段设置	5
3.2	其它基本命令	6
4	简单示例	7
5	预设宏包介绍	8
6	高级设置	8
6.1	切换字体	8
6.2	内部字段设置	9
III	Implementation	10

*This document corresponds to husttrans.cls ?, dated ?.

1	Process Options	10
2	Check Engine	10
3	Font Setting	10
4	Basic Format	13
5	Load Packages	14
6	Variables Setting	15
7	Localization	15
8	Style Setting	17
8.1	Equation Style	17
8.2	Theorem Style	17
8.3	Floating Objects Style	18
8.4	Table Style	18
8.5	Caption Style	19
8.6	Code Highlight Style	20
8.7	Section Title Style	20
8.8	TOC Style	21
8.9	Head & Foot Style	22
8.10	List Environment Style	22
8.11	Footnote Style	22
9	Specical Page	22
10	Other Command	26
IV	Index	27

I Introduction

This is a translation template for [Huazhong University of Science & Technology](#). This template is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

The whole project is published under LPPL v1.3 License at [GitHub](#).

II 使用说明

1 使用必要条件

1. 安装最新版本的 **TeXLive** (推荐) 或 **MiKTeX**。因为未及时更新的宏包可能存在未修复的 **bug**，请确保所有宏包都更新至最新。
2. 安装如下中文字体¹:
 - a) AdobeSongStd-Light
 - b) AdobeKaitiStd-Regular
 - c) AdobeHeitiStd-Regular
 - d) AdobeFangsongStd-Regular



如果使用 LuaTeX，安装字体之后需运行命令 `mkluatexfontdb` 生成字体索引。

2 安装

2.1 安装到本地

使用如下命令即可安装本模板到本地：

```
make install
```

如需卸载，则使用如下命令：

```
make uninstall
```

对于没有安装 **Make** 的 **Windows** 系统用户，可以使用如下命令安装：

```
makewin32.bat install
```

如需卸载，则使用如下命令：

```
makewin32.bat uninstall
```

虽然 `makewin32.bat` 表现与 **Makefile** 极其相似，但是还是强烈建议你安装 **Make**，对于 **Windows** 用户可以在[这里](#)下载。

¹本模板所用到的英文字体 **Tex Gyre Termes**，**Droid Sans** 和 **CMU Typewriter Text** 均默认安装于 **TeXLive** 和 **MiKTeX** 中。

2.2 免安装使用

如果你希望临时使用本模板，而非安装到本地供长期使用。使用如下命令解压模板文件：

```
make unpack
```

对于没有安装 Make 的 Windows 系统用户，则使用如下命令解压：

```
makewin32.bat unpack
```

再将 `husttrans` 目录下的如下文件拷贝到你 $\text{T}_{\text{E}}\text{X}$ 工程根目录下即可：

- `husttrans.cls`

3 基本用法



本文档只能使用 $\text{X}_{\text{L}}\text{A}_{\text{T}}\text{E}_{\text{X}}$ 或 $\text{L}_{\text{u}}\text{a}_{\text{L}}\text{A}_{\text{T}}\text{E}_{\text{X}}$ （推荐）编译。

在源文件开头处选择加载本文档类型，即可使用本模板，如下所示：

```
\documentclass{husttrans}
```

3.1 基本字段设置

模板中定义一些命令用于设置文档中的字段。

<code>\title</code>	<code>\title{\translation title}</code>
---------------------	---

该命令用于设定外文翻译的标题。

<code>\author</code>	<code>\author{\Orignial author}</code>
----------------------	--

该命令用于设定原文作者。

<code>\translator</code>	<code>\translator{\Translator}</code>
--------------------------	---------------------------------------

该命令用于设定翻译作者。

<code>\date</code>	<code>\date{\Year}{\Month}{\Day}</code>
--------------------	---

该命令用于设定日期。如果不设定，则会选择当前编译日期。

<code>\supervisor</code>	<code>\supervisor{\supervisor}</code>
--------------------------	---------------------------------------

该命令用于设定指导老师名（含职称）。

3.2 其它基本命令

下面来介绍其它基本命令。

<code>\frontmatter</code>	这一组命令用于设定译文的状态、改变样式,其具体使用见简单示例。 <code>\frontmatter</code>
<code>\mainmatter</code>	用在文档最开始,表明文档的前言部分(如封面,目录等)的开始。 <code>\mainmatter</code>
<code>\backmatter</code>	表示译文正文的开始。 <code>\backmatter</code> 表示译文正文的结束。

<code>\maketitle</code>	<code>\maketitle</code> 和 <code>\makecover</code> 作用相同,用于生成封面。
<code>\makecover</code>	

<code>\tableofcontents</code>	用于生成目录。
-------------------------------	---------

<code>\dateformat</code>	用于打印日期。
--------------------------	---------

<code>\bibliography</code>	<code>\bibliography{(.bib file)}</code>
----------------------------	---

用于生成参考文献。

`appendix` `appendix` 环境用于附录环境。你可以将附录置于 `appendix` 环境中,如:

```
\begin{appendix}
  <content>
\end{appendix}
```

<code>\appendix</code>	或者使用 <code>\appendix</code> 代表后文均为附录,如:
------------------------	---

```
\appendix
<content>
```

<code>\listoffigures</code>	这两个命令分别用于生成图片和表格索引,可以根据要求在前言中或附录中使用。
<code>\listoftables</code>	

```
\TurnOffTabFontSetting
\TurnOnTabFontSetting
```

因为模板中设定了表格的行距和字号，使得使用中无法临时自定义表格的行距和字号。故提供两个命令用于关闭和开启默认表格的行距和字号设置。比如你如果需要输出一个自己定义字号的表格，可以使用如下示例：

```
\begingroup
\TurnOffTabFontSetting
\footnotesize % 设置字号
\begin{tabular}{...}
    <content>
\end{tabular}
\TurnOnTabFontSetting
\endgroup
```

```
\email \email{<Email Address>}
```

用于生成邮箱地址。如`\email{name@example.com}`会生成如下效果的地址：
`name@example.com`。

4 简单示例

如下为一个使用本模板的简单示例。更完整的例子请见 `husttrans-example.tex` 文件，其效果见 `husttrans-example.pdf`。

```
1 \documentclass{husttrans}
2 \title{原文标题}
3 \author{原文作者}
4 \translator{翻译作者}
5 \supervisor{指导老师}
6 \date{2014}{3}{1}
7
8 \begin{document}
9
10 \frontmatter
11 \maketitle
12 \tableofcontents
13 \listoffigures
14 \listoftables
15 \mainmatter
16
17 %% 正文
18
19 \backmatter
```

```

20 \bibliography{参考文献.bib文件}
21 \appendix
22 %% 附录剩余部分
23 \end{document}

```

5 预设宏包介绍

本模板中预设了一些宏包，下面对其进行简单介绍。

- **algorithm2e** 算法环境。
- **enumitem** 自定义列表环境的式样。
- **fancynum** 用于将大数每三位断开。
- **listings** 代码环境。如需更好的代码高亮可以使用 **minted** 宏包。
- **longtable** 跨页的超长表格环境。
- **ltxtable** **longtable** 环境和 **tabularx** 环境的合并。
- **multirow** 用于表格中合并行。
- **overpic** 用于在图片上层叠其他内容。
- **tabularx** 扩展到表格环境。
- **xy-pic** 用于绘制简单图形。如需更高级功能可以使用 **tikz** 宏包。
- **zhnumber** 用于生成中文数字。

6 高级设置

6.1 切换字体

模板正文字体为宋体 (AdobeSongStd-Light)，同时我们提供如下命令切换中文字体：

```

\HEI {\HEI <content>}
\hei {\hei{<content>}}

```

切换字体为黑体 (AdobeHeitiStd-Regular)。

```

\KAI {\KAI <content>}
\kai {\kai{<content>}}

```

切换字体为楷体 (AdobeKaitiStd-Regular)。

```

\FANGSONG {\FANGSONG <content>}
\fangsong {\fangsong{<content>}}

```

切换字体为仿宋 (AdobeFangsongStd-Regular)。

如果需要加载其他字体，请参阅宏包 **fontspec**，宏包 **xeCJK** (对于 Xe_{La}TeX) 和宏包 **luatex-jaf** (对于 Lua_{La}TeX) 的文档。

6.2 内部字段设置

本模板定义了内部字段，其具体内容见 [section 7](#)。通过更改这些字段，可以对格式进行自定义。

III Implementation

```
1 <*class>
2 \RequirePackage{ifthen}
```

1 Process Options

Use **xkeyval** to process options.

```
3 \RequirePackage{xkeyval}
   Process options and load class book.
4 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{book}}
5 \ProcessOptionsX
6 \LoadClass[12pt, a4paper, openany]{book}
```

2 Check Engine

Check engine, only Xe_{La}TeX and Lua_{La}TeX are supported.

```
7 \RequirePackage{iftex}
8 \ifXeTeX\else
9   \ifLuaTeX\else
10     \begingroup
11       \errorcontextlines=-1\relax
12       \newlinechar=10\relax
13       \errmessage{^^J
14         *****^^J
15         * XeTeX or LuaTeX is required to compile this document.^^J
16         * Sorry!^^J
17         *****^^J
18       }%
19     \endgroup
20   \fi
21 \fi
```

3 Font Setting

Set font used in document. Firstly, it's English font. We use **fontspec** package to handle font. We choose Tex Gyre Termes, Droid Sans and CMU Typewriter Text as document main font, sans font and mono font.

Then it's the Chinese font setting. We use **xecjk** package (for \LaTeX) or **luatex-jafont** package (for \LuaTeX , recommend) to handle Chinese font. We will use font: AdobeSongStd-Light, AdobeKaitiStd-Regular, AdobeHeitiStd-Regular and AdobeFangsongStd-Regular.

```

22 \ifXeTeX % XeTeX 下使用 fontspec + xeCJK 处理字体
23 % 英文字体
24 \RequirePackage{fontspec}
25 \RequirePackage{xunicode}
26 \setmainfont[
27   Ligatures={Common,TeX},
28   Extension=.otf,
29   UprightFont=*-regular,
30   BoldFont=*-bold,
31   ItalicFont=*-italic,
32   BoldItalicFont=*-bolditalic]{texgyretermes}
33 \setsansfont[Ligatures={Common,TeX}]{Droid Sans}
34 \setmonofont{CMU Typewriter Text}
35 \defaultfontfeatures{Mapping=tex-text}
36 % 中文字体
37 \RequirePackage[CJKmath]{xeCJK}
38 \setCJKmainfont[
39   BoldFont={Adobe Heiti Std},
40   ItalicFont={Adobe Kaiti Std}]{Adobe Song Std}
41 \setCJKsansfont{Adobe Kaiti Std}
42 \setCJKmonofont{Adobe Fangsong Std}
43 \xeCJKsetup{PunctStyle=kaiming}
44
45 \newcommand\ziju[2]{\renewcommand{\CJKglue}{\hspace #1} #2}}

\HEI
46 \newCJKfontfamily\HEI{Adobe Heiti Std}

\KAI
47 \newCJKfontfamily\KAI{Adobe Kaiti Std}

\FANGSONG
48 \newCJKfontfamily\FANGSONG{Adobe Fangsong Std}

\hei
49 \newcommand{\hei}[1]{\HEI #1}}

```

```

\kai
50 \newcommand{\kai}[1]{\{\KAI #1\}}

\fangsong
51 \newcommand{\fangsong}[1]{\{\FANGSONG #1\}}
52 \else\fi
53 \ifLuaTeX % LuaTeX 下使用 luatex-jan 处理字体 [推荐]
54 \RequirePackage{luatexja-fontspec}
55 % 英文字体
56 \setmainfont[Ligatures={Common,TeX}]{Tex Gyre Termes}
57 \setsansfont[Ligatures={Common,TeX}]{Droid Sans}
58 \setmonofont{CMU Typewriter Text}
59 \defaultfontfeatures{Mapping=tex-text,Scale=MatchLowercase}
60 % 中文字体
61 \setmainjfont[
62 BoldFont={AdobeHeitiStd-Regular},
63 ItalicFont={AdobeKaitiStd-Regular}]{AdobeSongStd-Light}
64 \setsansjfont{AdobeKaitiStd-Regular}
65 \defaultjfontfeatures{JFM=kaiming}
66
67 \newcommand\ziju[2]{\vbox{\ltjsetParameter{kanjiskip=#1} #2}}

\HEI
68 \newjfontfamily\HEI{AdobeHeitiStd-Regular}

\KAI
69 \newjfontfamily\KAI{AdobeKaitiStd-Regular}

\FANGSONG
70 \newjfontfamily\FANGSONG{AdobeFangsongStd-Regular}

\hei
71 \newcommand{\hei}[1]{\{\jfontspec{AdobeHeitiStd-Regular} #1\}}

\kai
72 \newcommand{\kai}[1]{\{\jfontspec{AdobeKaitiStd-Regular} #1\}}

\fangsong
73 \newcommand{\fangsong}[1]{\{\jfontspec{AdobeFangsongStd-Regular} #1\}}
74 \else\fi

Generate Chinese number using zhnumber.
75 \RequirePackage{zhnumber}
76 \def\CJKnumber#1{\zhnumber{#1}} % 兼容 CJKnumb

```

4 Basic Format

Use **interfaces** package to handle font size and line spread. We set global line spread to 1.3.

```
77 \RequirePackage{interfaces-Latex}
78 \changefont{linespread=1.3}
```

Use **geometry** package to handle paper page.

```
79 \RequirePackage{geometry}
80 \geometry{
81   a4paper,
82   top=1.2in,
83   bottom=1.2in,
84   left=1in,
85   right=1in,
86   includefoot
87 }
88 \pdfpagewidth=\paperwidth
89 \pdfpageheight=\paperheight
```

Indent of paragraph and skip between paragraphs.

```
90 \RequirePackage{indentfirst}
91 \setlength{\parindent}{2em}
92 \setlength{\parskip}{0pt plus 2pt minus 1pt}
```

Packages to handle color.

```
93 \RequirePackage{color}
94 \RequirePackage[table]{xcolor}
```

Use **hyperref** package to generate cross-reference link.

```
95 \RequirePackage[unicode]{hyperref}
96 \hypersetup{
97   bookmarksnumbered=true,
98   bookmarksopen=true,
99   bookmarksopenlevel=1,
100  breaklinks=true,
101  colorlinks=true,
102  allcolors=black,
103  linktoc=all,
104  plainpages=false,
105  pdfpagelabels=true,
106  pdfstartview={XYZ null null 1},
107  pdfinfo={Template.Info={husttrans.cls v1.0 2014/03/01, Copyright (C) 2013-2014 by
```

108 }

5 Load Packages

Load packages for math.

```
109 \RequirePackage{amsmath,amssymb,amsfonts}
110 \RequirePackage[amsmath,amsthm,thmmarks,hyperref,thref]{ntheorem}
111 \RequirePackage{fancyhdr}
112 \setfnumgsym{\,}
113 \RequirePackage[lined,boxed,linesnumbered,ruled,vlined,algorithm2e]
```

Load packages for picture.

```
114 \RequirePackage[all]{xy}
115 \RequirePackage{overpic}
116 \RequirePackage{graphicx,caption,subcaption}
```

Load packages for table.

```
117 \RequirePackage{array}
118 \RequirePackage[multirow,tabularx,ltxttable]
```

Load package for code highlight. Here we use **listings** to highlight the code. But if you need more features, use **minted**.

```
119 \RequirePackage{listings}
```

Load package for bibliography cite style.

```
120 \RequirePackage[numbers,square,comma,super,sort&compress]{natbib}
```

Other packages for style setting.

```
121 \RequirePackage{titlesec}
122 \RequirePackage{titletoc}
123 \RequirePackage{tocvsec2}
124 \RequirePackage[inline]{enumitem}
125 \RequirePackage{fancyhdr}
126 \RequirePackage{afterpage}
127 \RequirePackage{datenumbers}
128 \RequirePackage{etoolbox}
129 \RequirePackage{appendix}
130 \RequirePackage[titles]{tocloft}
131 \RequirePackage{xstring}
132 \RequirePackage{perpage}
```

6 Variables Setting

\title Commands to set the title.

```
133 \def\title#1{\gdef\HUST@zhtitle{#1}\hypersetup{pdftitle={#1}}}  
134 \title{}
```

\author Commands to set the author.

```
135 \def\author#1{\gdef\HUST@zhauthor{#1}}  
136 \author{}
```

\translator Commands to set the translator.

```
137 \def\translator#1{\gdef\HUST@zhtranslator{#1}\hypersetup{pdfauthor={#1}}}  
138 \translator{}
```

\date A command to set the date and several commands to display date.

```
\dateformat 139 \def\date#1#2#3{  
140     \setdate{#1}{#2}{#3}  
141 }  
142 \setdatetoday  
143 \def\dateformat{~\thedateyear~年~\thedatemonth~月~\thedateday~日}
```

\supervisor Commands to set the supervisor.

```
144 \def\supervisor#1{\gdef\HUST@zhsupervisor{#1}}  
145 \supervisor{}
```

7 Localization

Chinese localization.²

```
146 \def\indexname{索引}  
147 \def\figurename{图}  
148 \def\tablename{表}  
149 \AtBeginDocument{\def\listingscaption{代码}}  
150 \def\bibname{参考文献}  
151 \def\contentsname{目\hspace{1em}录}  
152 \def\contentsnamenospace{目录}  
153 \def\appendixname{附录}  
154 \def\HUST@listfigurename{插图索引}  
155 \def\HUST@listtablename{表格索引}
```

²The `autorefname` Reference:<http://tex.stackexchange.com/questions/52410/how-to-use-the-command-autorefname-to-implement-the-same-effect-when-use-the-command>

```

156 \def\equationautorefname{公式}
157 \def\footnoteautorefname{脚注}
158 \def\itemautorefname~#1\null{第~#1~项\null}
159 \def\figureautorefname{图}
160 \def\tableautorefname{表}
161 \def\appendixautorefname{附录}
162 \expandafter\def\csname\appendixname autorefname\endcsname{\appendix-
    name}
163 \def\chapterautorefname~#1\null{第\zhnumber{#1}章\null}
164 \def\sectionautorefname~#1\null{#1~小节\null}
165 \def\subsectionautorefname~#1\null{#1~小节\null}
166 \def\subsubsectionautorefname~#1\null{#1~小节\null}
167 \def\FancyVerbLineautorefname~#1\null{第~#1~行\null}
168 \def\pageautorefname~#1\null{第~#1~页\null}
169 \def\lstlistingautorefname{代码}
170 \def\definitionautorefname{定义}
171 \def\propositionautorefname{命题}
172 \def\lemmaautorefname{引理}
173 \def\theoremautorefname{定理}
174 \def\axiomautorefname{公理}
175 \def\corollaryautorefname{推论}
176 \def\exerciseautorefname{练习}
177 \def\exampleautorefname{例}
178 \def\proofautorefname{证明}
179 \SetAlgorithmName{算法}{算法}{算法索引}
180 \SetAlgoProcName{过程}{过程}
181 \SetAlgoFuncName{函数}{函数}
182 \def\AlgoLineautorefname~#1\null{第~#1~行\null}

```

Internal variables.

```

183 \long\def\HUST@zhtitletitle{华中科技大学\\毕业设计（论文）\\[0.8cm] 外
    文文献翻译}
184 \def\HUST@zhauthortitle{原文作者}
185 \def\HUST@zhtranslatortitle{翻译作者}
186 \def\HUST@zhsupervisortitle{指导教师}

```

Set \listfigurename and \listtablename.

```

187 \def\listfigurename{\HUST@listfigurename}
188 \def\listtablename{\HUST@listtablename}

```


8 Style Setting

8.1 Equation Style

Allow long equation breaking between lines or pages.

```
189 \allowdisplaybreaks[4]
```

Set skip between equation and context.

```
190 \abovedisplayskip=10bp plus 2bp minus 2bp
```

```
191 \abovedisplayshortskip=10bp plus 2bp minus 2bp
```

```
192 \belowdisplayskip=\abovedisplayskip
```

```
193 \belowdisplayshortskip=\abovedisplayshortskip
```

Set equation numbering style.

```
194 \numberwithin{equation}{chapter}
```

8.2 Theorem Style

We use **amsthm** to handle the proof environment and use **ntheorem** to handle other theorem environments.

```
195 \theoremnumbering{arabic}
```

```
196 \theoremseparator{: }
```

```
197 \theorempreskip{1.2ex plus 0ex minus 1ex}
```

```
198 \theorempostskip{1.2ex plus 0ex minus 1ex}
```

```
199 \theoremheaderfont{\normalfont\bfseries\HEI}
```

```
200 \theoremsymbol{}
```

```
201
```

```
202 \theoremstyle{definition}
```

```
203 \theorembodyfont{\normalfont}
```

```
204 \newtheorem{definition}{定义}[chapter]
```

```
205
```

```
206 \theoremstyle{plain}
```

```
207 \theorembodyfont{\itshape}
```

```
208 \newtheorem{proposition}{命题}[chapter]
```

```
209 \newtheorem{lemma}{引理}[chapter]
```

```
210 \newtheorem{theorem}{定理}[chapter]
```

```
211 \newtheorem{axiom}{公理}[chapter]
```

```
212 \newtheorem{corollary}{推论}[chapter]
```

```
213 \newtheorem{exercise}{练习}[chapter]
```

```
214 \newtheorem{example}{例}[chapter]
```

```
215 \def\proofname{\hei{证明}}
```

8.3 Floating Objects Style

Set the skip to the context for floating object with argument ‘h’.

```
216 \setlength{\intextsep}{0.7\baselineskip plus 0.1\baselineskip minus 0.1\baselineskip}
```

Set the skip to the context for top or bottom floating object.

```
217 \setlength{\textfloatsep}{0.8\baselineskip plus 0.1\baselineskip minus 0.2\baselineskip}
```

Set the fraction of floating object. Make the fraction less crowded than default value to prevent floating object occupying too much space.

```
218 \renewcommand{\textfraction}{0.15}
219 \renewcommand{\topfraction}{0.85}
220 \renewcommand{\bottomfraction}{0.65}
221 \renewcommand{\floatpagefraction}{0.60}
```

8.4 Table Style

`\tabincell` A command make it easier to insert a new table into an existing cell.

```
222 \newcommand{\tabincell}[2]{\begin{tabular}{@{}#1@{}}#2\end{tabular}}
```

To prevent `\cline` breaking page in **longtable** environment, use in this way: `\table content * \nopagebreak \cline{i-j}`³

```
223 \def\@cline#1-#2\@nil{%
224   \omit
225   \@multicnt#1%
226   \advance\@multispan\m@ne
227   \ifnum\@multicnt=\@ne\@firstofone{&\omit}\fi
228   \@multicnt#2%
229   \advance\@multicnt-#1%
230   \advance\@multispan\@ne
231   \leaders\hrule\@height\arrayrulewidth\hfill
232   \cr
233   \noalign{\nobreak\vskip-\arrayrulewidth}}
```

Here we set the global font setting (font size: 11pt and line spread: 1.4) for tables. But first we will declare a variable to determine whether table global font setting is activated.

```
234 \newif\ifHUST@useoldtabular
235 \HUST@useoldtabularfalse
```

³Reference:<http://tex.stackexchange.com/questions/52100/longtable-multirow-problem-with-cline-and-nopagebreak>

TurnOffTabFontSetting Use `\TurnOffTabFontSetting` to deactivate global font setting.

```
236 \def\TurnOffTabFontSetting{\HUST@useoldtabulartrue}
```

TurnOnTabFontSetting Use `\TurnOnTabFontSetting` to activate global font setting.

```
237 \def\TurnOnTabFontSetting{\HUST@useoldtabularfalse}
```

Hook the **tabular**, **tabularx** and **longtable** environment to imply the global font setting.

```
238 \AtBeginEnvironment{tabular}{  
239   \ifHUST@useoldtabular\else  
240     \changeont{size=11pt,linespread=1.4}  
241   \fi  
242 }  
243 \AtBeginEnvironment{tabularx}{  
244   \ifHUST@useoldtabular\else  
245     \changeont{size=11pt,linespread=1.4}  
246   \fi  
247 }  
248 \AtBeginEnvironment{longtable}{  
249   \ifHUST@useoldtabular\else  
250     \changeont{size=11pt,linespread=1.4}  
251   \fi  
252 }
```

8.5 Caption Style

Set caption font size as 11pt, use hang format, remove “:” after number and set the skip between context as 12pt.

```
253 \DeclareCaptionFont{HUST@captionfont}{\changeont{size=11pt}}  
254 \DeclareCaptionLabelFormat{HUST@caplabel}{#1~#2}  
255 \captionsetup{  
256   font=HUST@captionfont,  
257   labelformat=HUST@caplabel,  
258   format=hang,  
259   labelsep=quad,  
260   skip=12pt  
261 }
```

Set figure and table numbering style.

```
262 \renewcommand{\thetable}{\arabic{chapter}.\arabic{table}}  
263 \renewcommand{\thefigure}{\arabic{chapter}-\arabic{figure}}
```

8.6 Code Highlight Style

```
264 \definecolor{HUST@lstgreen}{rgb}{0,0.6,0}
265 \definecolor{HUST@lstmauve}{rgb}{0.58,0,0.82}
266
267 \lstset{
268   basicstyle=\footnotesize\ttfamily\changeont{linespread=1}\FANGSONG,
269   keywordstyle=\color{blue}\bfseries,
270   commentstyle=\color{HUST@lstgreen}\itshape\KAI,
271   stringstyle=\color{HUST@lstmauve},
272   showspaces=false,
273   showstringspaces=false,
274   showtabs=false,
275   numbers=left,
276   numberstyle=\tiny\color{black},
277   frame=lines,
278   rulecolor=\color{black},
279   breaklines=true
280 }
```

8.7 Section Title Style

Set the numbering depth for section.

```
281 \setcounter{secnumdepth}{3}
```

Chapter title format and spacing setting.

```
282 \titleformat{\chapter}
283 {
284   \bfseries
285   \HEI
286   \centering
287   \changeont{size=18pt}
288 }
289 {
290   \zhnumber{\thechapter}
291 }
292 {1em}
293 {}
294 \titlespacing*{\chapter}{0pt}{0pt}{20pt}
```

Section title format and spacing setting.

```
295 \titleformat*{\section}{\bfseries\HEI\changeont{size=16pt}}
296 \titlespacing*{\section}{0pt}{18pt}{6pt}
```

Subsection tilte format and spacing setting.

```
297 \titleformat*{\subsection}{\bfseries\HEI\changeont{size=14pt}}
298 \titlespacing*{\subsection}{0pt}{12pt}{6pt}
```

Subsubsection tilte format and spacing setting.

```
299 \titleformat*{\subsubsection}{\bfseries\HEI\changeont{size=13pt}}
300 \titlespacing*{\subsubsection}{0pt}{12pt}{6pt}
```

8.8 TOC Style

TOC depth.

```
301 \setcounter{tocdepth}{1}
```

TOC right margin.

```
302 \contentsmargin{2.0em}
```

Remove vertical space between two continues chapter entries. ⁴

```
303 \newskip\HUST@oldcftbeforechapskip
304 \HUST@oldcftbeforechapskip=\cftbeforechapskip
305 \newskip\HUST@oldcftbeforesecskip
306 \HUST@oldcftbeforesecskip=\cftbeforesecskip
307 \let\HUST@oldl@chapter\l@chapter
308 \let\HUST@oldl@section\l@section
309 \let\HUST@oldl@subsection\l@subsection
310 \def\l@chapter#1#2{\HUST@oldl@chapter{#1}{#2}\cftbeforechapskip=3pt}
311 \def\l@section#1#2{\HUST@oldl@section{#1}{#2}\cftbeforechapskip=\HUST@old-
cftbeforechapskip\cftbeforesecskip=3pt}
312 \def\l@subsection#1#2{\HUST@oldl@subsection{#1}{#2}\cftbeforesecskip=\HUST@old-
cftbeforesecskip}
```

Set LOF LOT style. ⁵

```
313 \renewcommand*\cftfigpresnum{\figurename~}
314 \newlength{\HUST@cftfignumwidth@tmp}
315 \settowidth{\HUST@cftfignumwidth@tmp}{\cftfigpresnum}
316 \addtolength{\cftfignumwidth}{\HUST@cftfignumwidth@tmp}
317 \renewcommand{\cftfigaftersnumb}{\quad~}
318 \renewcommand*\cfttabpresnum{\tablename~}
319 \newlength{\HUST@cfttabnumwidth@tmp}
320 \settowidth{\HUST@cfttabnumwidth@tmp}{\cfttabpresnum}
321 \addtolength{\cfttabnumwidth}{\HUST@cfttabnumwidth@tmp}
322 \renewcommand{\cfttabaftersnumb}{\quad~}
```

⁴Reference:<http://tex.stackexchange.com/questions/89103/remove-vertical-space-between-two-chapters-in-table-of-contents-in-latex>

⁵Reference:<http://www.latex-community.org/viewtopic.php?f=5&t=1838>

8.9 Head & Foot Style

```
323 \pagestyle{empty}
```

8.10 List Environment Style

```
324 \setlist{noitemsep,partopsep=0pt,topsep=.8ex}
325 \setlist[1]{labelindent=\parindent}
326 \setlist[enumerate,1]{label=\arabic*.,ref=\arabic*}
327 \setlist[enumerate,2]{label*=\arabic*,ref=\theenumi.\arabic*}
328 \setlist[enumerate,3]{label=\emph{\alph*}},ref=\theenumii\emph{\alph*}}
329 \setlist[description]{font=\bfseries\HEI}
```

8.11 Footnote Style

```
330 \MakePerPage{footnote}
```

9 Specical Page

```
\frontmatter
```

```
\mainmatter 331 \def\frontmatter{
```

```
\backmatter 332 \clearpage
```

```
333 \@mainmatterfalse
```

```
334 \pagenumbering{Roman}
```

```
335 }
```

```
336 \def\mainmatter{
```

```
337 \clearpage
```

```
338 \@mainmattertrue
```

```
339 \pagenumbering{arabic}
```

```
340 }
```

```
341 \def\backmatter{
```

```
342 \clearpage
```

```
343 \@mainmatterfalse
```

```
344 \settocdepth{chapter}
```

```
345 \hypersetup{bookmarksopenlevel=0}
```

```
346 }
```

Title page.

```
347 \def\HUST@titlepage{
```

```
348 \begin{center}
```

```
349 \null
```

```
350 \vskip 2cm
```

```
351 {\LARGE \HUST@zhtitletitle}\[0.5cm]
```

```
352 \rule{\linewidth}{0.5mm}\[0.55cm]
```

```

353 {\LARGE \bfseries \sffamily \HEI \HUST@zhtitle}\[0.35cm]
354 \rule{\linewidth}{0.5mm}\[3.5cm]
355 \begin{minipage}[t]{0.8\textwidth}
356 \TurnOffTabFontSetting
357 \Large
358 \setlength{\extrarowheight}{5pt}
359 \begin{tabular}{r@{: }l}
360 \parbox[t][][t]{6em}{\raggedleft \emph{\HUST@zhauthortitle}} &
361 \parbox[t][][t]{15em}{\HUST@zhauthor}
362 \\
363 \parbox[t][][t]{6em}{\raggedleft \emph{\HUST@zhtranslatortitle}} &
364 \parbox[t][][t]{15em}{\HUST@zhtranslator}
365 \ifthenelse{\equal{\HUST@zhsupervisor}{}}{\}{
366 \\
367 \parbox[t][][t]{6em}{\raggedleft \emph{\HUST@zhsupervisortitle}} &
368 \parbox[t][][t]{15em}{\HUST@zhsupervisor}
369 }
370 \end{tabular}
371 \TurnOnTabFontSetting
372 \end{minipage}
373 \vfill
374 {\Large \dateformat}
375 \end{center}
376 }

```

\maketitle Commands to generate title page.

```

\makecover 377 \def\maketitle{
378 \begin{group}
379 \hypersetup{allcolors=black}
380 \let\HUST@oldthepage\thepage
381 \def\thepage{封面}
382 \begin{titlepage}
383 \thispagestyle{empty}
384 \HUST@titlepage
385 \end{titlepage}
386 \let\thepage\HUST@oldthepage
387 \setcounter{page}{1}
388 \end{group}
389 }
390 \let\makecover\maketitle

```

`\tableofcontents` A command to generate table of contents.

```
391 \let\HUST@tableofcontents\tableofcontents
392 \def\tableofcontents{
393   \pdfbookmark{\contentsnamenospace}{\contentsnamenospace}
394   \HUST@tableofcontents
395   \clearpage
396 }
```

`\bibliography` A command to generate bibliography page.

```
397 \def\thudot{\unskip.}
398 \def\thumasterbib{[Master Thesis]}
399 \def\thuphdbib{[Doctor Thesis]}
400 \bibliographystyle{thubib}
401 \let\HUST@bibliography\bibliography
402 \def\bibliography#1{
403   \clearpage
404   \phantomsection
405   \addcontentsline{toc}{chapter}{\bibname}
406   \begingroup
407   \changefont{size=10.5pt,linespread=1}
408   \setlength\bibsep{0.5ex}
409   \HUST@bibliography{#1}
410   \endgroup
411 }
```

`appendix` The appendix environment.

```
412 \newif\ifHUST@inappendix
413 \HUST@inappendixfalse
414 \newif\ifHUST@appendix@resetmainmatter
415 \HUST@appendix@resetmainmatterfalse
416 \renewenvironment{appendix}{
417   \if@mainmatter
418     \HUST@appendix@resetmainmatterfalse
419   \else
420     \HUST@appendix@resetmainmattertrue
421     \@mainmattertrue
422   \fi
423   \appendixtitletocon
424   \appendices
425   \titleformat{\chapter}
426   {
```



```

427     \bfseries\HEI
428     \centering
429     \changeont{size=18pt}
430 }
431 {\appendixname\,\thechapter}
432 {1em}
433 {}
434 \HUST@inappendixtrue
435 }{
436 \endappendices
437 \HUST@inappendixfalse
438 \ifHUST@appendix@resetmainmatter
439     \HUST@appendix@resetmainmatterfalse
440     \@mainmatterfalse
441 \else\fi
442 }

```

\listoffigures A command to generate list of figures.

```

443 \let\HUST@listoffigures\listoffigures
444 \def\listoffigures{
445     \clearpage
446     \ifHUST@inappendix
447         \addtocounter{chapter}{1}
448         \def\listfigurename{\appendixname\,\thechapter\hspace{1em}\HUST@listfigurename}
449     \else
450         \def\listfigurename{\HUST@listfigurename}
451     \fi
452     \phantomsection
453     \ifHUST@inappendix
454         \addcontentsline{toc}{chapter}{\thechapter\hspace{1em}\HUST@list-
figurename}
455     \else
456         \addcontentsline{toc}{chapter}{\listfigurename}
457     \fi
458     \HUST@listoffigures
459     \def\listfigurename{\HUST@listfigurename}
460 }

```

\listoftables A command to generate list of tables.

```

461 \let\HUST@listoftables\listoftables
462 \def\listoftables{

```

```

463 \clearpage
464 \ifHUST@inappendix
465     \addtocounter{chapter}{1}
466     \def\listtablename{\appendixname\,\thechapter\hspace{1em}\HUST@listtablename}
467 \else
468     \def\listtablename{\HUST@listtablename}
469 \fi
470 \phantomsection
471 \ifHUST@inappendix
472     \addcontentsline{toc}{chapter}{\thechapter\hspace{1em}\HUST@list-
    tablename}
473 \else
474     \addcontentsline{toc}{chapter}{\listtablename}
475 \fi
476 \HUST@listoftables
477 \def\listtablename{\HUST@listtablename}
478 }

```

10 Other Command

`\email`

```

479 \def\email#1{
480     \href{mailto:#1}{\texttt{#1}}
481 }
482 </class>

```

IV Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.

Symbols	
\@cline	223
\@firstofone	227
\@height	231
\@mainmatterfalse . . .	333, 343, 440
\@mainmattertrue	338, 421
\@multicnt	225, 227, 228, 229
\@multispan	226, 230
A	
\abovedisplayshortskip ..	191, 193
\abovedisplayskip	190, 192
\addcontentsline	
	405, 454, 456, 472, 474
\addtocounter	447, 465
\addtolength	316, 321
\AlgoLineautorefname	182
\allowdisplaybreaks	189
\alph	328
\appendices	424
\appendix	5
appendix (environment)	5, <u>412</u>
\appendixautorefname	161
\appendixname 153, 162, 431, 448, 466	
\appendixtitletocon	423
\arabic	262, 263, 326, 327
\arrayrulewidth	231, 233
\AtBeginDocument	149
\AtBeginEnvironment	238, 243, 248
\author	4, <u>135</u> , 135, 136
\axiomautorefname	174
B	
\backmatter	5, <u>331</u> , 341
\baselineskip	216, 217
\begin	222, 348, 355, 359, 382
\belowdisplayshortskip	193
\belowdisplayskip	192
\bfseries	199, 269,
	284, 295, 297, 299, 329, 353, 427
\bibliography	5, <u>397</u> , 401, 402
\bibliographystyle	400
\bibname	150, 405
\bibsep	408
\bottomfraction	220
C	
\captionsetup	255
\centering	286, 428
\cftbeforechapskip ..	304, 310, 311
\cftbeforesecskip . . .	306, 311, 312
\cftfigaftersnumb	317
\cftfignumwidth	316
\cftfigpresnum	313, 315
\cfttabaftersnumb	322
\cfttabnumwidth	321
\cfttabpresnum	318, 320
\changeont 78, 240, 245, 250, 253,	
	268, 287, 295, 297, 299, 407, 429
\chapter	282, 294, 425
\chapterautorefname	163
\CJKglue	45
\CJKnumber	76
\clearpage	
	332, 337, 342, 395, 403, 445, 463
\color	269, 270, 271, 276, 278
\contentsmargin	302

<code>\HUST@useoldtabularfalse</code>	235, 237	<code>\lemmaautorefname</code>	172
<code>\HUST@useoldtabulartrue</code>	236	<code>\linewidth</code>	352, 354
<code>\HUST@zhauthor</code>	135, 361	<code>\listfigurename</code>	
<code>\HUST@zhauthortitle</code>	184, 360		187, 448, 450, 456, 459
<code>\HUST@zhsupervisor</code>	144, 365, 368	<code>\listingscaption</code>	149
<code>\HUST@zhsupervisortitle</code>	186, 367	<code>\listoffigures</code>	5, 443, 443, 444
<code>\HUST@zhtitle</code>	133, 353	<code>\listoftables</code>	5, 461, 461, 462
<code>\HUST@zhtitletitle</code>	183, 351	<code>\listtablename</code>	188, 466, 468, 474, 477
<code>\HUST@zhtranslator</code>	137, 364	<code>\LoadClass</code>	6
<code>\HUST@zhtranslatortitle</code>	185, 363	<code>\lstlistingautorefname</code>	169
<code>\hypersetup</code>	96, 133, 137, 345, 379	<code>\lstset</code>	267
		<code>\ltjsetparameter</code>	67

I

<code>\if@mainmatter</code>	417
<code>\ifHUST@appendix@resetmainmatter</code>	414, 438
<code>\ifHUST@inappendix</code>	412, 446, 453, 464, 471
<code>\ifHUST@useoldtabular</code>	234, 239, 244, 249
<code>\ifLuaTeX</code>	9, 53
<code>\ifnum</code>	227
<code>\ifthenelse</code>	365
<code>\ifXeTeX</code>	8, 22
<code>\indexname</code>	146
<code>\intextsep</code>	216
<code>\itemautorefname</code>	158
<code>\itshape</code>	207, 270

J

<code>\jfontspec</code>	71, 72, 73
-------------------------	------------

K

<code>\KAI</code>	7, 47, 47, 50, 69, 69, 270
<code>\kai</code>	7, 50, 50, 72, 72

L

<code>\l@chapter</code>	307, 310
<code>\l@section</code>	308, 311
<code>\l@subsection</code>	309, 312
<code>\LARGE</code>	351, 353
<code>\Large</code>	357, 374
<code>\leaders</code>	231

M

<code>\m@ne</code>	226
<code>\mainmatter</code>	5, 331, 336
<code>\makecover</code>	5, 377, 390
<code>\MakePerPage</code>	330
<code>\maketitle</code>	5, 377, 377, 390

N

<code>\newCJKfontfamily</code>	46, 47, 48
<code>\newif</code>	234, 412, 414
<code>\newjfontfamily</code>	68, 69, 70
<code>\newlength</code>	314, 319
<code>\newlinechar</code>	12
<code>\newskip</code>	303, 305
<code>\newtheorem</code>	204,
	208, 209, 210, 211, 212, 213, 214
<code>\noalign</code>	233
<code>\nobreak</code>	233
<code>\normalfont</code>	199, 203
<code>\null</code>	158, 163,
	164, 165, 166, 167, 168, 182, 349
<code>\numberwithin</code>	194

O

<code>\omit</code>	224, 227
--------------------	----------

P

<code>\pageautorefname</code>	168
<code>\pagenumbering</code>	334, 339
<code>\pagestyle</code>	323

<code>\tiny</code>	276	U	
<code>\title</code>	4, <u>133</u> , 133, 134	<code>\unskip</code>	397
<code>\titleformat</code>	282, 295, 297, 299, 425	V	
<code>\titlespacing</code>	294, 296, 298, 300	<code>\vbox</code>	67
<code>\topfraction</code>	219	<code>\vfill</code>	373
<code>\translator</code>	4, <u>137</u> , 137, 138	<code>\vskip</code>	233, 350
<code>\ttfamily</code>	268	X	
<code>\TurnOffTabFontSetting</code>		<code>\xeCJKsetup</code>	43
.	6, <u>236</u> , 236, 356	Z	
<code>\TurnOnTabFontSetting</code>		<code>\zhnumber</code>	76, 163, 290
.	6, <u>237</u> , 237, 371	<code>\ziju</code>	45, 67