



使用LaTeX排版论文攻略

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为什么要用LaTeX

❖ 使用Word写毕设论文时遇到的问题

- 编号问题：章、节、目、图、表、公示等编号容易出错
- 格式问题纠结：图、表、公式格式调整；目录、参考文献格式调整
- 公式和参考文献输入问题
- 打印时，目录等域会出现“错误，未找到引用源”



主要内容

1

- LaTeX简介

- LaTeX概述、应用举例、对比、适用群体
- CTeX

2

- LaTeX基本知识

- 文件结构、语法、命令
- 如何插入文本、图表、公式

3

- 论文模板介绍与应用

- 定义命令、环境、多文件编译
- 毕设论文模板各部分组成
- 参考文献制作



Part 1: LaTeX简介

❖ 概述

- 什么是TeX
- 什么是LaTeX

❖ LaTeX应用举例、对比、适用群体

❖ CTeX





LaTeX概述(1/2)

❖ 什么是TeX

- 高德纳(Donald E. Knuth) 于1978 年开发的排版系统
- 用于生成精美图书的排版系统
- 尤其擅长数学公式排版

❖ 什么是LaTeX

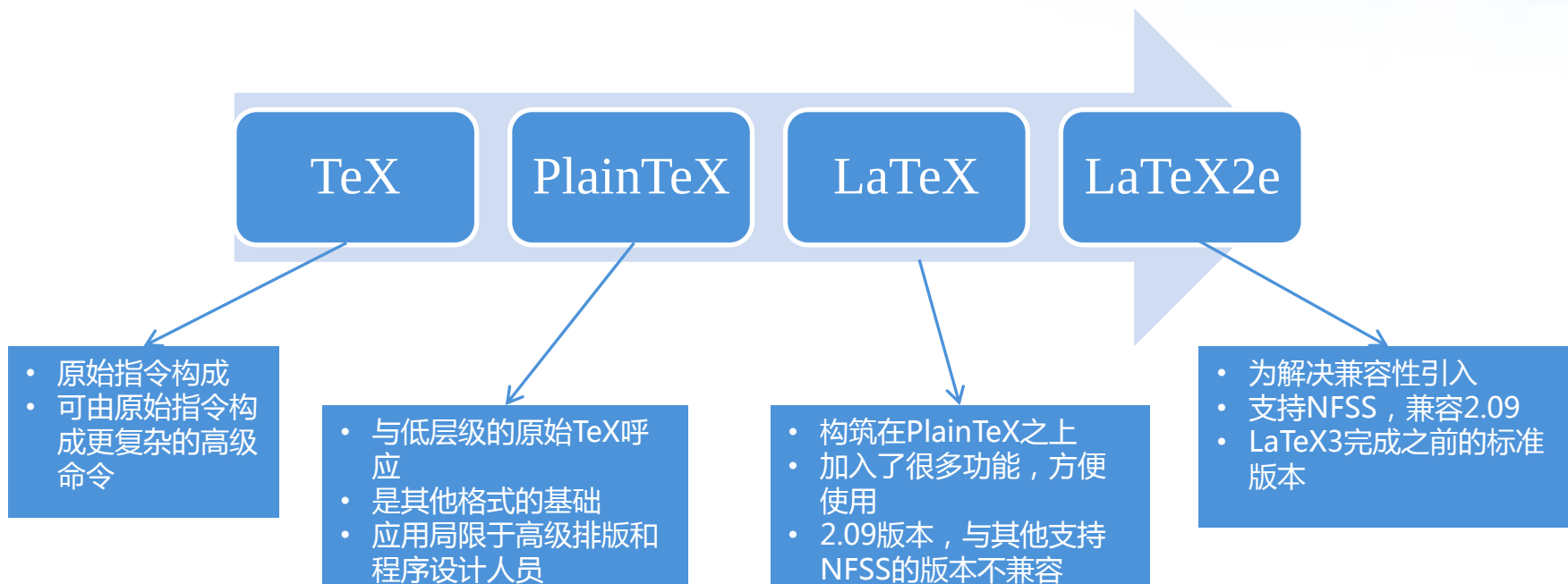
- 莱斯利·兰伯特 (Leslie Lamport) 开发，用于降低TeX使用门槛
- 含有丰富的宏包，用于扩展功能
- 广泛用于学术界、期刊会议论文模板
- TeX、PlainTeX、LaTeX、LaTeX2e



LaTeX概述(2/2)

❖ 发展历程

- TeX、PlainTeX、LaTeX、LaTeX2e





LaTeX排版举例-公式

无编号公式

$$\mathcal{F}(\xi) = \int_{-\infty}^{\infty} f(x) e^{-j2\pi\xi x} dx$$

多行多列公式

$$y = d \qquad z = 1 \qquad (1)$$

$$y = cx + d \qquad z = x + 1 \qquad (2)$$

$$y_{12} = bx^2 + cx + d \qquad z = x^2 + x + 1$$

$$y(x) = ax^3 + bx^2 + cx + d \qquad z = x^3 + x^2 + x + 1 \qquad (3)$$



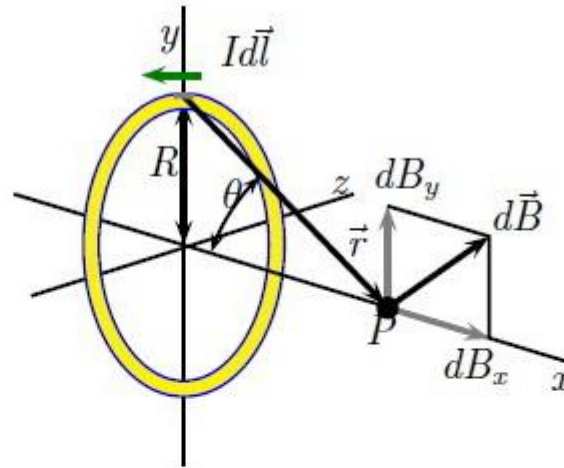
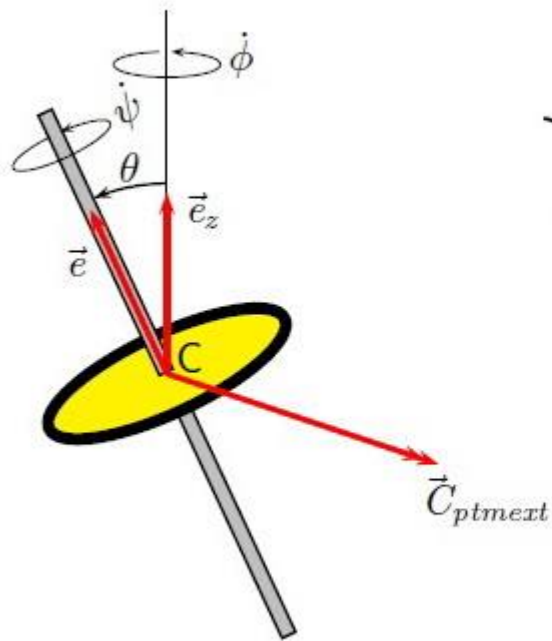
LaTeX排版举例-公式

编号多行公式

$$\begin{aligned} A = \lim_{n \rightarrow \infty} \Delta x & \left(a^2 + \left(a^2 + 2a\Delta x + (\Delta x)^2 \right) \right. \\ & + \left(a^2 + 2 \cdot 2a\Delta x + 2^2 (\Delta x)^2 \right) \\ & + \left(a^2 + 2 \cdot 3a\Delta x + 3^2 (\Delta x)^2 \right) \\ & + \dots \\ & \left. + \left(a^2 + 2 \cdot (n-1)a\Delta x + (n-1)^2 (\Delta x)^2 \right) \right) \\ & = \frac{1}{3} (b^3 - a^3) \quad (4) \end{aligned}$$



LaTeX排版举例-图形



1	2	3	A	697 Hz
4	5	6	B	770 Hz
7	8	9	C	852 Hz
*	0	#	D	941 Hz
1209 Hz 1366 Hz 1477 Hz 1633 Hz				



LaTeX排版举例-文档

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potential to have context sources or sensors (and sensor networks) in the vicinity of a mobile user sold as services to the mobile user, to support context-aware applications. However, challenges are present in order to “elastically” on-demand form clouds of services and resources efficiently, seamlessly and in a robust manner.

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LaTeX与Word对比

Microsoft Word	LaTeX
文字处理工具	专业排版软件
所见即所得	所见即所想，所思即所得
高级功能不易掌握	进阶难，但一般用不到
处理长文档需要丰富经验	和短文档处理没什么差别
需要花费大量时间调整格式	无需担心格式，可专心内容
公式排版差强人意	尤其擅长公式排版
二进制格式，系统兼容性差	文本格式，跨平台，兼容性强
付费商业许可	免费，有大量开源模板



LaTeX适用人群

- ❖ 需要经常发表学术论文的
- ❖ 论文含很多数学公式、算法的
- ❖ 工作在Unix/Linux、Mac操作系统下的
- ❖ 对论文排版有兴趣的
- ❖ 适用但不仅限于...



工具：CTeX

❖ 什么是CTeX

- MiKTeX、fpTeX、teTeX、CTeX：TeX 在不同的硬件和操作系统上有不同的实现版本
- CTeX指的是CTeX中文套装的简称，是把MiKTeX和一些常用的相关工具，如GSview，WinEdt 等包装在一起制作的一个简易安装程序
- 对中文支持部分进行了配置，使得安装后马上就可以使用中文。



安装CTeX

❖ 最新稳定版本为2.9.2.164，下载链接：

- <http://www.ctex.org/CTeXDownload>
- <http://m2.libtop.com/278/7089834274237>（图书馆电子资源）

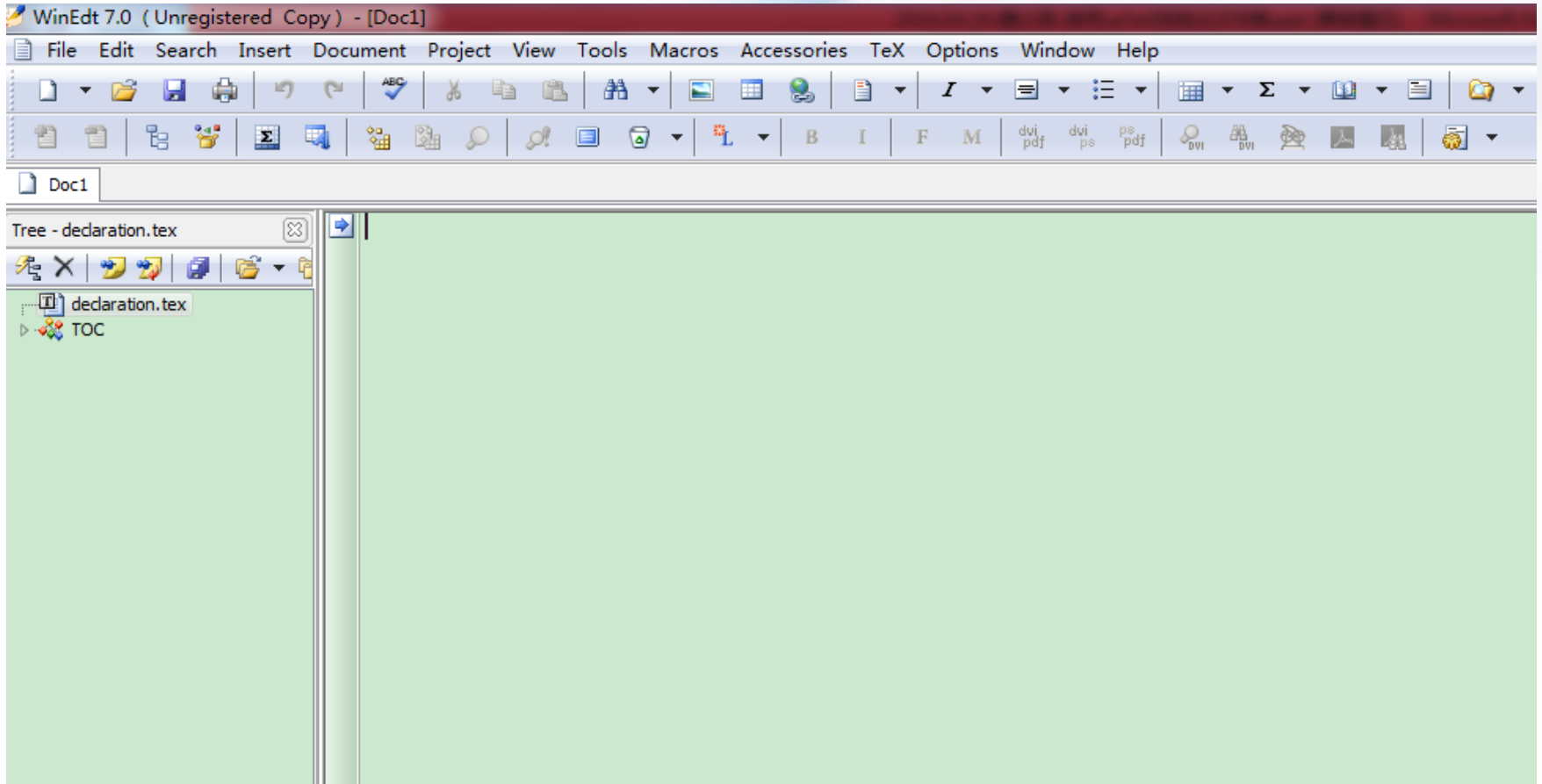
❖ 版本区别

- Basic，只含基础宏包，其他宏包根据需要自动下载
- Full，含全部宏包（推荐）

❖ 傻瓜式安装，根据提示一步一步操作即可



WinEdt编辑器





Part 2: LaTeX 基本知识

- ❖ 文件格式、结构
- ❖ 语法、常用命令
 - 基本语法
 - 常用命令
- ❖ 文本、图片、表格、公式应用





文件格式

❖ LaTeX的源文件为.tex 文件，正确编译后生成pdf文件

❖ 英文文档

- LaTeX、PDFLaTeX、XeLaTeX编译方式

❖ 中文文档

- 保存成UTF-8格式
- XeLaTeX编译方式



文档结构

```
\documentclass[a4paper]{article}  
\usepackage{graphicx}  
\graphicspath{{figures/}}  
\begin{document}  
Hello world!  
\end{document}
```

❖ 文档类型

- [] 内是可选设置项

❖ 导言区

- 导言区通常用来对文档的性质做一些设置，或自定义一些命令。

❖ 正文区

- `\begin{document}` 和 `\end{document}` 声明了一个document环境，里面是论文的正文部分，也就是直接输出的部分。



基本语法

- ❖ 所有命令都是以“\”开头的
- ❖ 注释以“%”开头
- ❖ 空格：LaTeX中空格用来隔开单词(英语一类字母文字)，多个空格等效于一个空格；中文的空格则用“~”表示。
- ❖ 换行：命令“\\”或“\newline”。
- ❖ 分段：命令“\par”或空出一行
- ❖ 换页：命令“\newpage”或者“\clearpage”。
- ❖ 一些命令的定义，可参考：LaTeX Help:

http://www.emerson.emory.edu/services/latex/latex_toc.html



常用命令

命令

<code>\chapter</code> 章	<code>\section</code> 节	<code>\subsection</code> 小节	<code>\paragraph</code> 带题头段落
<code>\centering</code> 居中对齐	<code>\emph</code> 强调	<code>\verb</code> 原样输出	<code>\url</code> 超链接
<code>\footnote</code> 脚注	<code>\item</code> 列表条目	<code>\caption</code> 标题	<code>\includegraphics</code> 插入图片
<code>\label</code> 标号	<code>\cite</code> 引用参考文献	<code>\ref</code> 引用图表公式等	

环境

<code>table</code> 表格	<code>figure</code> 图片	<code>equation</code> 公式
<code>itemize</code> 无编号列表	<code>enumerate</code> 编号列表	<code>description</code> 描述



文本常用指令(1/2)

❖ 经常需要用到宏包`fontspec`、`setspace`

❖ 常用指令

- `\setmainfont{Times New Roman}` %设置西文字体
- `\setCJKmainfont{SimSun}` %设置中文字体（宋体）
- `\zihao{字号}`，%设置字体大小，例如`\zihao{-4}`，为小四号字体
- `\bf`、`\bfseries{}`、`\textbf{}`，%字体加粗
- `\underline` %下划线
- `\emph`、`\textit{}` %斜体
- `\linespread{1.5}\selectfont` %改变行间距；
- `\setlength{parindent}{0pt}` %设置首行缩进为0；
- `\setlength{parskip}{1ex}` %设置段落间距为1ex；
- `\noindent` %段首不缩进



文本常用指令(2/2)

❖ 对齐方式:

- `\begin{flushleft}...\end{flushleft}` 左对齐
- `\begin{center}...\end{center}` 居中
- `\begin{flushright}...\end{flushright}` 右对齐
- 也可以使用命令`\raggedright`、`\centering`和`\raggedleft`使以后的文本按指定方式对齐.



插入图形

```
\usepackage{graphicx,float}
```

```
\begin{figure}[htb]  
  \centering  
  \includegraphics[width=5cm]{5.jpg}  
  \caption{第一个图形}\label{pic1}  
\end{figure}
```

写出高质量的文章、书籍等印刷品。它对复杂表格和数学公示的支持尤为突出，因此非常适用于生成科技类和数学类的文档，当然你可以利用 LaTeX 生成各种其他类型的文档，如图 1 所示。



图 1: 第一个图形

❖ 必需 **graphicx** 宏包

❖ **float** 宏包，定义浮动位置

- 位置参数指定浮动体摆放的偏好
- h 当前位置(here), t 顶部(top), b 底部(bottom), p 单独成页(page)

❖ **\caption**，图片标题

❖ **\label**、**\ref**，用来生成文章的标记和引用



插入表格

```
\usepackage{array}
```

```
\begin{table}[htb]  
  \centering  
  \begin{tabular}{|l|c|r|}  
    \hline  
    a & a & a \\  
    a & a & a \\  
    a & a & a \\  
    \hline  
  \end{tabular}  
  \caption{表格1}\label{table1}  
\end{table}
```

a	a	a
a	a	a
a	a	a

表 1: 表格 1

- ❖ 推荐个网站，可以快速生成LaTeX表格：<http://www.tablesgenerator.com/>
- ❖ LaTeX下的表格处理：<http://zhuanlan.zhihu.com/p/19749566>



插入公式

```
\usepackage{amsmath,amsthm,amsfont  
s,amssymb,bm}
```

```
\begin{equation}\label{equal}  
• x^2+y^2=z^2 \\  
\sqrt{abc}-\sqrt[2]{edf}=\sum_2 z  
\end{equation}
```

```
\begin{align}  
\label{equal}  
x^2+y^2=z^2 \\  
\sqrt{abc}-\sqrt[2]{edf}=\sum_2 z  
\end{align}
```

$$x^2 + y^2 = z^2 \sqrt{abc} - \sqrt[2]{edf} = \sum_2 z \quad (1)$$

$$x^2 + y^2 = z^2 \quad (2)$$

$$\sqrt{abc} - \sqrt[2]{edf} = \sum_2 z \quad (3)$$

- ❖ `begin{equation}`仅能生成单行、单个公式
- ❖ `begin{align}`生成多行、多个公式
- ❖ 在线公式编辑器: <http://latex.codecogs.com/eqneditor/editor.php>



Part 3: 模板应用

- ❖ 模板
- ❖ 定义命令、环境、多文件编译
- ❖ 毕设论文模板各部分实现
 - 封面、摘要、目录、标题等
 - 参考文献制作





什么是模板

❖ 模板

- 已经设计好的格式框架
- 好的模板可使用户专注于内容，而不用将过多的时间花费在调整框架上

❖ paper.cls

- 厦门大学硕（博）士毕业论文模板

❖ 定义命令、环境、多文件编译



定义命令

```
\(re)newcommand {name}[num]{definition}
```

- ❖ **name**, 是你想要定义的命令的名称
- ❖ **num**, 可选, 用于制定命令所需参数的数目
- ❖ **definition**, 命令的定义, 也是要执行的操作
- ❖ 对已有命令进行重写, 需换成 **\renewcommand**



定义环境

```
\(re)newenvironment{name}[num]{before}{after}
```

❖ 环境：

- 用`\begin`和`\end`包含起来的特殊段落，即`\begin{环境名}...\end{环境名}`，我们称为环境。
- 不同环境中的内容将用不同的方式来排版。

❖ `name`、`num`定义同`\newcommand`

❖ `before`中提供的内容,将在`begin{name}`命令包含的文本之前处理

❖ `after`中提供的内容,将在包含的文本之后，`\end{name}`的前面处理



多文件编译

❖ 处理一个较大的文件，一个有效的方法是把它分成几个部分，然后分别用input 或者 include命令导入。

❖ \input{filename}

- 连续不分页
- 可以递归调用，相当于在input位置插入文件内容

❖ \include 命令

- 总是开始新的一页
- 适合于book类按chapter切割



论文封面

学校编码:10384

分类号 _____ 密级 _____

学号:30920111242116

UDC _____

```
%%封面%%
\renewcommand\maketitle{
  \clearpage
  \thispagestyle{empty}
  \begin{flushleft}
    \bf\songti\zihao{-4}学校编码:10384 \hfill 分类号 \uline{~~~~~}密级 \uline{~~~~~}
    \vskip 3pt
    \bf\songti\zihao{-4}学号:\value{idn} \hfill UDC \uline{~~~~~}
  \end{flushleft}
  \vspace*{15pt}
  \begin{center}
    \includegraphics[width=6.19cm,height=1.77cm]{xm.jpg}
    \vskip -3pt
    \bf\songti\zihao{-2}\value{degree}~~~士~~~学~~~位~~~论~~~文
    \vskip 10pt
    \bf\heiti\zihao{2}\value{title}
    \vskip 10pt
    \bf\zihao{3}\value{entitle}~
    \vskip 15pt
    \bf\kaishu\zihao{-2} ~\value{author}~
    \vskip 15pt
    \large
    \renewcommand\arraystretch{1.2}
    \begin{tabular}{rl}
      指\导\教\师: & \value{teacher} \\
      专\业\名\称: & \value{subject} \\
      论文提交日期: & \value{subdate} \\
      论文答辩日期: & \value{defdate} \\
      学位授予日期: & \value{oftdate}
    \end{tabular}
    \end{center}
    \vskip 50pt
    \begin{flushright}
      \bf\songti\zihao{4}指~~~导~~~教~~~师 \uline{~~~~~}
      \vskip 5pt
      \bf\songti\zihao{4}答辩委员会主席 \uline{~~~~~}
    \end{flushright}
    \vskip 30pt
    \begin{center}
      \bf\songti\zihao{4} \value{pubdate}
    \end{center}
  }
}
```

厦门大学

硕 士 学 位 论 文

银行客户关系管理信息系统的设计与实现

Design and Implementation of the Customer Relationship
Management Information System for Banks

黄亚磊

指 导 教 师: 周理成教授

专 业 名 称: 纳米材料科学

论文提交日期: 2017 年 4 月

论文答辩日期: 2017 年 5 月

学位授予日期: 2017 年 6 月

指 导 教 师 _____

答辩委员会主席 _____

2017 年 4 月



英文封面

%%英文封面%%

```
\newcommand\makeencover{
  \clearpage
  \thispagestyle{empty}
  \vspace*{15pt}
  \begin{center}
  \includegraphics[width=128pt,height=128pt]{xmu_logo.png}
  \vskip 10pt
  \bf\zihao{3}\value@entitle~
  \vskip 5pt
  \mdseries\zihao{3}A Dissertation Submitted to the Graduate School
  in Partial Fulfillment of the Requirements for the Degree of \\ \value@engdegree
  \vskip 40pt
  \zihao{3}By \\ \value@enauthor
  \vskip 30pt
  \zihao{3}Supervised by \\ \value@enteacher
  \vskip 40pt
  \zihao{3} \value@enschool \\ Xiamen University
  \vskip 40pt
  \zihao{3} \value@enpubdate
  \end{center}
}
```



**Design and Implementation of the Customer Relationship
Management Information System for Banks**

A Dissertation Submitted to the Graduate School in Partial
Fulfillment of the Requirements for the Degree of
Master of Science

By
Yalei Huang

Supervised by
Prof. Licheng Zhou

Department of Chemistry
Xiamen University

April, 2017



摘要

```

\newcommand\keywords[1]{\def\value@keywords{#1}} %中文关键字
\newcommand\keywords[1]{\def\value@keywords{#1}} %英文关键字

%中文摘要
\newenvironment{cabstract}{%
  \thispagestyle{plain}%
  \fancyfoot{}%
  %\def\xmu@keywords{#1}%
  \begin{center}%
    {\heiti\zihao{-3}\textbf{摘~~~要}}%
  \end{center}%
}{}

%英文摘要
\newenvironment{eabstract}{%
  \thispagestyle{plain}%
  \fancyfoot{}%
  \begin{center}%
    {\zihao{-3}\textbf{Abstract}}%
  \end{center}%
  \vspace{12bp}%
  \par%
}{}

\par%
\vspace{12bp}%
\noindent%
{\zihao{-4}\textbf{Key Words:~}}\value@keywords%
% \addcontentsline{toe}{chapter}{Abstract} %加入目录
\clearpage%
\cleardoublepage
}

```

摘 要

客户关系管理 (Customer Relationship Management, 简称 CRM) 作为一种新

Abstract

Customer relationship management (CRM), an updated product of a new management model, a business marketing concept and information technology, is regarded as a combination of information technology and business management, which has attracted the attention of management of banking community ever since. Bank CRM means to establish a customer-centric management concept for commercial banks, allocate the resources on the basis of accurate market orientation, enhance the customer managers' initiatives and realize the upgrading of bank self-value.

Firstly, this paper introduces the need for banks to establish a CRM system, CRM system for banks to help. Then, Bank CRM system requirements analysis, design the architecture of the bank CRM system, consisting of three-layer structure, one data source layer, is the analysis of the data warehouse layer, interface presentation layer. The data warehouse analysis layer is the core of the CRM system as a whole. Then the article describes the bank's CRM system technology, using the J2EE platform using Struts 2, Spring, Hibernate framework. Finally, the CRM system to achieve some interface screen shots, and some of the key code presents.

Key Words: CRM; Bank; J2EE Platform; Data Warehouse



中文目录

```
\renewcommand\contentsname{目~~~录}

\def\dotsep{0.75} %目录点间的距离
\renewcommand\l@chapter[2]{%
  \ifnum \c@tocdepth >\m@ne
    \addpenalty{-\@highpenalty}%
    \vskip 4bp \@plus\p@
    \setlength\@tempdima{4em}%
    \begingroup
      \parindent \z@ \rightskip \@pnumwidth
      \parfillskip -\@pnumwidth
      \leavevmode
      \advance\leftskip\@tempdima
      \hskip -\leftskip
      {\bf\heiti\zihao{4}\csname\endcsname #1} %
      \bf\leaders\hbox{$\m@th\mkern \dotsep mu\hbox{.}\mkern \dotsep mu$}\hfill
      \nobreak{\normalfont\normalcolor \bf #2}\par
      \penalty\@highpenalty
    \endgroup
  \fi}
```

```
\renewcommand*{\l@section[2]{
  \vskip 4bp \@plus\p@
  \begingroup
    \parindent 1.5em \rightskip \@pnumwidth
    \parfillskip -\@pnumwidth
    \@tempdima 1.8em\relax
    \hskip -\leftskip
    {\bf\heiti\zihao{-4}\csname\endcsname #1} % numberline is called here, and
    \bf\leaders\hbox{$\m@th\mkern \dotsep mu\hbox{.}\mkern \dotsep mu$}\hfill
    \nobreak{\normalfont\normalcolor \bf #2}\par
    \penalty\@highpenalty
  \endgroup
}
```

```
\renewcommand*{\l@subsection[2]{
  \vskip 4bp \@plus\p@
  \begingroup
    \parindent 3em \rightskip \@pnumwidth
    \parfillskip -\@pnumwidth
    \@tempdima 2.5em\relax
    \hskip -\leftskip
    {\songti\zihao{-4}\csname\endcsname #1} % numberline is called here, and
    \leaders\hbox{$\m@th\mkern \dotsep mu\hbox{.}\mkern \dotsep mu$}\hfill
    \nobreak{\normalfont\normalcolor #2}\par
    \penalty\@highpenalty
  \endgroup
}
```

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1.1 研究背景和意义	1
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英文目录

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2.2 Introduction of Database Access Technology	7
2.3 Summary	8
Papers Published During Postgraduate	9
References	10
Acknowledgements	11

```
%英文目录
\newcommand\tableofengcontents{
\pagestyle{xmu@empty} %设置中文目录页眉
%\fancyhead[C]{\hfill\small\songti\leftmark\hfill}
\if@twocolumn \@restonecoltrue \onecolumn
\else \@restonecolfalse
\fi
\chapter*{\engcontentsname
\@mkboth{\MakeUppercase\engcontentsname}{\MakeUppercase\engcontentsname}}
}

\@starttoc{toe} %生成英文目录
\if@restonecol\twocolumn\fi
\pagestyle{xmu@empty} %设置英文目录页眉
}
```

❖ 参考链接: <http://blog.csdn.net/solstice/article/details/1589348>



论文章节格式(1/5)

❖ 章节格式

```
%章节样式 {Chapter, Section, Subsection}
\renewcommand\chapter{
    \clearpage%
    %\pagestyle{xmu@plain}%
    \pagestyle{fancy} %
    \fancyhead{} %
    \fancyhead[CO]{\hfill\small\songti\leftmark\hfill}%
    \fancyhead[CE]{\makebox[\textwidth][c]{\hfill\small\songti\value@title\hfill}}
    %\fancyhead[CE]{\hfill\small\songti\value@title\hfill}
    %\fancyhead[CO]{\hfill\small\songti\value@title\hfill}
    \cfoot{\small\thepage} %
    \global\@topnum\z@%
    \secdef\@chapter\@schapter
    %\pdfbookmark[\contentsname]{toc}{\thechapter.\thebookmark}
}

\renewcommand\section{\@startsection {section}{1}{\z@}%
    {-1ex \@plus -1ex \@minus -.2ex}%
    {1.3ex}%
    {\heiti\zihao{4}\bfseries}}

\renewcommand\subsection{\@startsection {subsection}{2}{\z@}%
    {-1ex \@plus -1ex \@minus -.2ex}%
    {1.3ex}%
    {\heiti\zihao{-4}\bfseries}}
```

参考链接: http://blog.sina.com.cn/s/blog_5e16f1770100lqn7.html



论文章节格式(2/5)

❖ 页眉页脚格式

```
\renewcommand\chapter{
    \clearpage%
    %\pagestyle{xmu@plain}%
    \pagestyle{fancy}%
    \fancyhead{}%
    \fancyhead[CO]{\hfill\small\songti\leftmark\hfill}%
    \fancyhead[CE]{\makebox[\textwidth][c]{\hfill\small\songti\value{title}\hfill}}
    \cfoot{\small\thepage}%
    \global\@topnum\z@%
    \secdef\@chapter\@schapter
}
```

第一章 绪论

表 1-1: 基本资料表

字段名称	字段类型	长度	字段描述	备注
账户号	Number	30		主键
密码	Number	30	加密	
姓名	Varchar	50		



论文章节格式(3/5)

❖ 一级、二级标题格式

```
\renewcommand\section{\@startsection {section}{1}{\z@}%  
    {-1ex \@plus -1ex \@minus -.2ex}%  
    {1.3ex}%  
    {\heiti\zihao{4}\bfseries}}  
\renewcommand\subsection{\@startsection {subsection}{2}{\z@}%  
    {-1ex \@plus -1ex \@minus -.2ex}%  
    {1.3ex}%  
    {\heiti\zihao{-4}\bfseries}}
```

2.1 J2EE 的开发框架

J2EE 技术自从被推出以来就得到了广泛认可和应用,随着多年的技术演变和发展, J2EE 技术平台已经日趋成熟,成为当今电子商务的最佳解决方案。相对于微软推出的 .NET 平台, J2EE 继承了 Java 平台无关性的优点,成为金融, 保险, 电信等大型应用系统的首选平台方案,如图2.1所示。

2.1.2 Hibernate 概述

Hibernate 是一个开放源代码的对象关系映射框架,对 JDBC 进行了轻量级的对象封装,使得 JAVA 程序员可以使用对象编程思维来操作数据库,可以应用在任何使用 JDBC 的场合,可以在 JAVA 客户端程序中使用,也可以在 Servlet/JSP 的 Web 应用中使用,最厉害的是,它可以在应用 EJB 的 J2EE 架构中取代 CMP (容器管理持久化),完成数据持久化的重任。



论文章节格式(4/5)

❖ 章节标题格式

- main.tex 中定义
- `\titleformat{\chapter}{\vspace*{-4.5em}\centering\heiti\zihao{-3}\bfseries}{第
\,chaptername 章}{1em}{\vspace{-1em}}`

第一章 绪论

第一章 绪论

第一章 绪论

第1章 绪论

1.1 研究背景和意义

1.1 研究背景和意义



论文章节格式(5/5)

❖ 图、表、公式标题格式

■ usepackage{caption}

```
%% ===== 图表定义 =====  
\renewcommand{\figurename}{\bfseries\songti\zihao{-4}图}  
\renewcommand{\tablename}{\bfseries\songti\zihao{-4}表}  
\renewcommand{\thetable}{\thechapter-\arabic{table}}  
\renewcommand{\theequation}{\thechapter-\arabic{equation}}  
  
\captionsetup[figure]{textfont={bf}}  
\captionsetup[table]{position=top,belowskip=1ex,textfont={bf}}
```



图 1.1: 图片 1

表 1-1: 基本资料表

姓名	性别	年龄	职业	住址
----	----	----	----	----

$$\hat{a} + \hat{a} = \sqrt{ab^2} + \sqrt[3]{abc}$$

(1-1)



参考文献

```
\cite{lable}  
\bibliographystyle{格式文件名}  
\bibliography{ BibTeX文件名}
```

❖ 需要编译四次才能得到正确结果

■ XeLaTeX → BiBTeX → XeLaTeX → XeLaTeX

❖ .bib, BibTeX文件, 参考文献所在的文件

❖ .bst, 参考文献格式文件



bst文件

❖ 系统提供的常见的bst文献格式

- plain, 使用数字编号, 按作者、日期、标题排序
- unsrt, 使用数字编号, 按引用次序排序
- alpha, 使用一种三字母缩写的方式编号, 按作者排序
- abbrev, 同plain基本相同, 只是定义了一些缩写

❖ 各个期刊对参考文献的要求不一样, 期刊会提供bst文件

- ieetr, 国际电气电子工程师协会期刊样式
- acm, 美国计算机学会期刊样式
- siam, 美国工业和应用数学学会期刊样式
- apalike, 美国心理学学会期刊样式



bst文件

❖ 本模板所使用的bst: GBTNlangC.bst

- 改编自吴凯的GBT7714-2005N.bst文件，产生符合《GB/T 7714-2005文后参考文献著录规则》

- [1] 钱争鸣, 邓明, 于艳萍. 教育支出的产出效应研究——基于空间 Panel Data 与菲德模型的数量分析 [J]. 教育与经济, 2008, 3:51–56.
- [2] 段景辉, 陈建宝. 城乡收入差距影响因素的非参数逐点回归解析 [J]. 财经研究, 2011, 1:101–111.
- [3] 田凤平, 周先波. 几乎理想需求系统面板数据模型的非参数估计分析 [J]. 南方经济, 2009, 7:36–49.



bib文件

❖ \cite{IEEE-1363}

```
@book{IEEE-1363,  
  author={{IEEE Std 1363-2000}},  
  title={{IEEE} Standard Specifications for Public-Key Cryptography},  
  address={New York},  
  publisher={IEEE},  
  year={2000}  
}  
  
@inproceedings{kocher99,  
  author={C. Kocher and J. Jaffe and B. Jun},  
  title={Differential Power Analysis},  
  editor={M. Wiener},  
  booktitle={Advances in Cryptology ({CRYPTO}~'99)},  
  series={Lecture Notes in Computer Science},  
  volume={1666},  
  pages={388-397},  
  publisher={Springer-Verlag},  
  month={August},  
  year={1999}  
}
```



BibTex文件制作

❖ 制作方式:BibTex

❖ Jabref

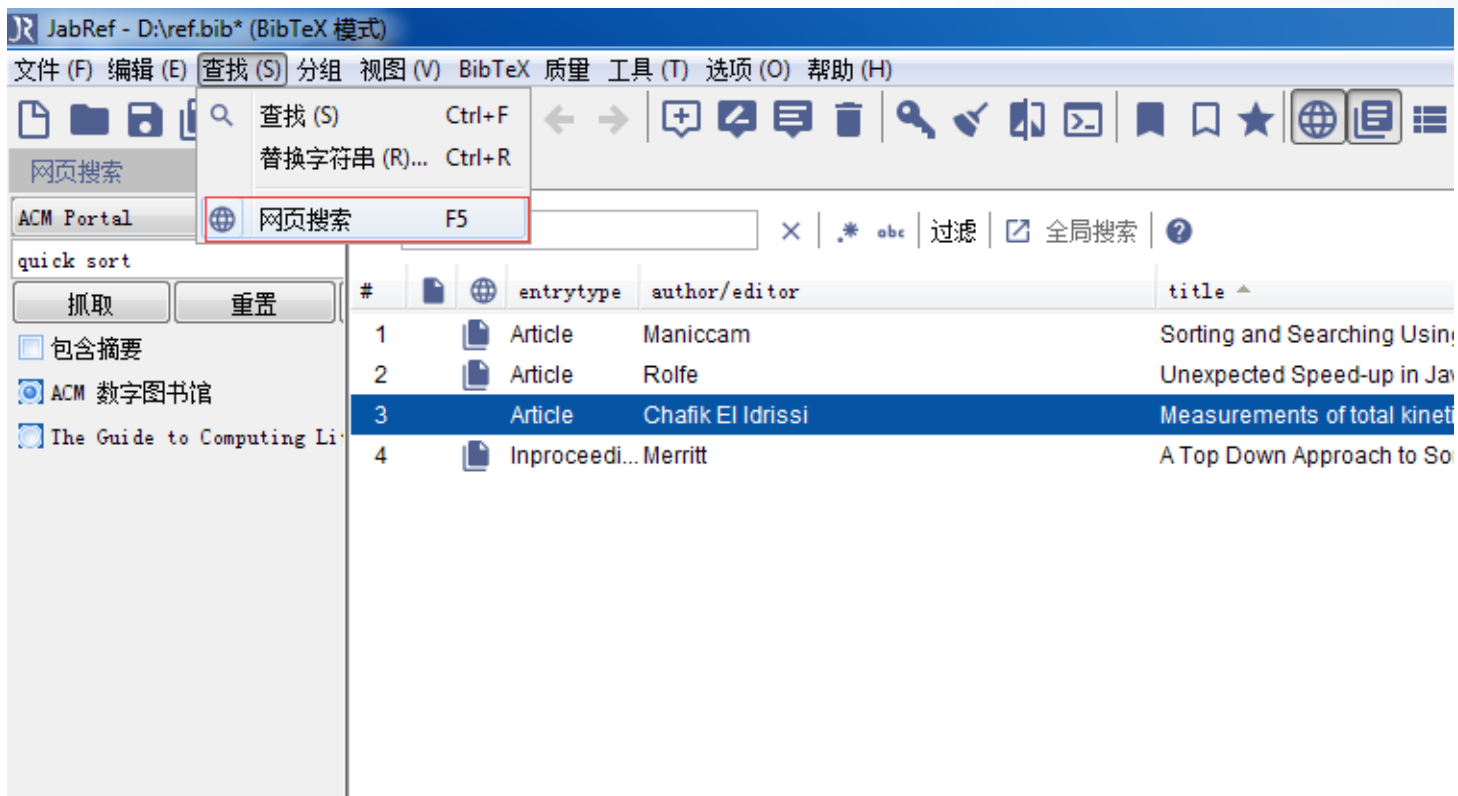
- 基于Java的图形界面管理Bibtex参考文献库
- 免费开源软件
- 跨平台使用
- Java JDK下载地址: http://java.com/zh_CN/download/manual.jsp
- Jabref下载地址: <http://www.fosshub.com/JabRef.html>



JabRef

❖ 方式一：手工建立条目

❖ 方式二：在线网页搜索





Jabref

❖ 方式三：Google Scholar搜索导出

- 可以直接保存为.bib文件
- 使用JabRef新建记录

❖ 学术搜索：<http://scholar.google.org>



学术搜索

文章

我的图书馆

时间不限

2016以来

2015以来

2012以来

自定义范围...

按相关性排序

按日期排序

搜索所有网页

中文网页

简体中文网页

```
@article{freedson1998calibration,
  title={Calibration of the Computer Science and Applications, Inc. accelerometer.},
  author={Freedson, Patty S and Melanson, Edward and Sirard, John},
  journal={Medicine and science in sports and exercise},
  volume={30},
  number={5},
  pages={777--781},
  year={1998}
}
```

computers available throughout the p, while making them effectively invisible. ticle explains what is new~ and different science involved in ubiquitous computing. brief overview of ...
被引用次数: 3365 相关文章 所有 21 个版本 Web of Science: 509 引用 保存 更多

[引用] Concrete mathematics:[a foundation for computer science; dedicated to Leonhard Euler (1707-1783)]
RL Graham - 1994 - Pearson Education India
被引用次数: 6256 相关文章 所有 15 个版本 引用 保存 更多



Jabref

❖ 方式四：数据库搜索



Xia Men University

Anomaly detection: A survey

Full Text: [PDF](#)

Authors: [Varun Chandola](#) [University of Minnesota, Minneapolis, MN](#)
[Arindam Banerjee](#) [University of Minnesota, Minneapolis, MN](#)
[Vipin Kumar](#) [University of Minnesota, Minneapolis, MN](#)

Published in:



• Journal
ACM Computing Surveys (CSUR) [Surveys Homepage](#) [archive](#)
Volume 41 Issue 3, July 2009
Article No. 15
[ACM](#) New York, NY, USA
[table of contents](#) doi> [10.1145/1541880.1541882](#)



2009 Article

- Research
- Refereed



Bibliometrics

- Downloads (6 Weeks): 517
- Downloads (12 Months): 4,311
- Downloads (cumulative): 24,156
- Citation Count: 377

Tools and Resources

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Export Formats:
[BibTeX](#) [EndNote](#) [ACM Ref](#)

Share:

[Author Tags](#) ▼



Recent authors with related interests ▼

Concepts in this article ▼

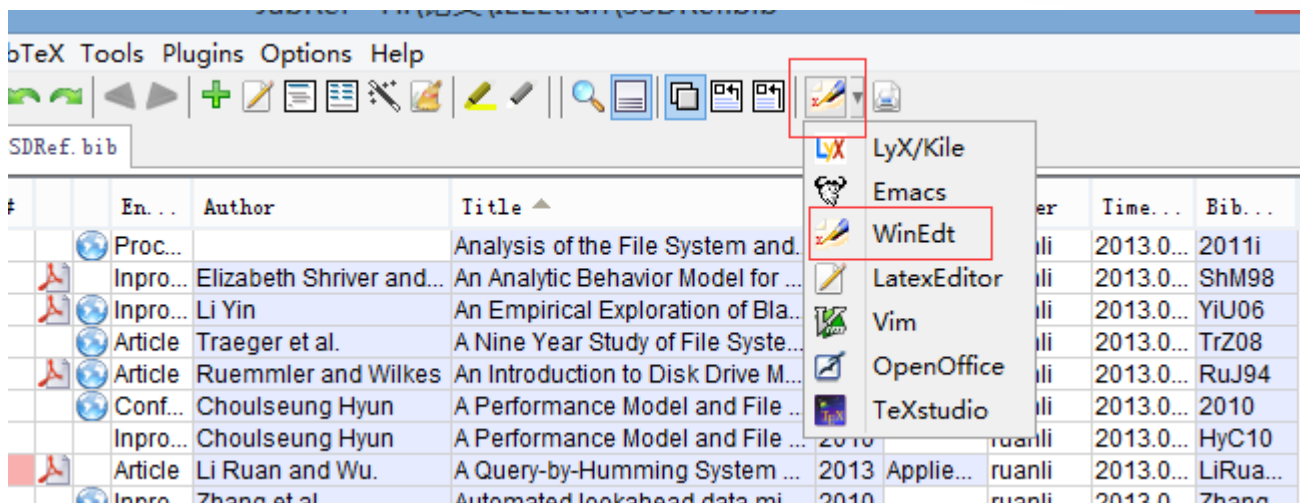
powered by
IBM Watson™



Jabref

❖ 往CTeX中插入文献

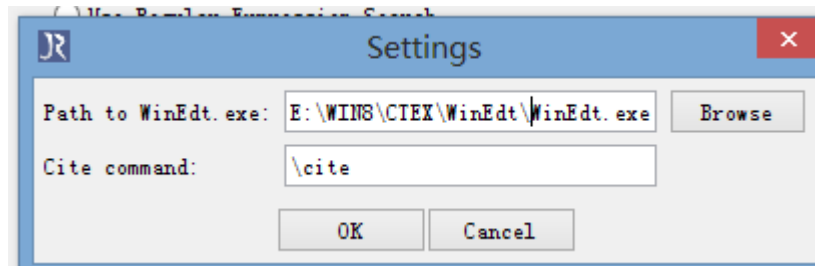
- 1. 选择进行文献推送的目标编辑器，这里我们使用WinEdt。





Jabref往CTeX中插入文献

- 2.在工具栏Options→Preference→External programs→Externalprograms→Settings for WinEdt
- 设置Path to WinEdt.exe为你安装的WinEdt的位置即可，即CTEX(安装目录)\WinEdt\WinEdt.exe。设置好后选择OK即可。





Endnote

❖ Endnote导出Bib文件

- 1、在endnote中选中你要导出的文献，选择“edit-output style-Open style manager..”在弹出来的界面中找到有name和category的两列的表格中一列，选择name那一列，然后按键盘b，往下翻，直到看到 BibTex Export那一项，然后勾上。这样就选择了输出bibtex输出方式。
- 2、直接关掉刚才那个界面，注意不要关掉整个界面，关掉刚才弹出的那个即可。选择所有要导出的文献，然后在file-export，进入导出界面。在界面中选择输出txt格式，在output style中选择bibtex export，然后给个名字，保存就ok。



论文其他部分

❖ 在读期间研究成果、附录、致谢

```
***致谢**  
\newenvironment{ack}{  
  \chapter*{致~~~~谢}  
  \pagestyle{fancy} %  
  \fancyhead{} %  
  \fancyhead[CO]{\hfill\small\songti{致~~~~谢}\hfill}%  
  \fancyhead[CE]{\makebox[\textwidth][c]{\hfill\small\songti{value@title}\hfill}}  
}{%  
  \par%  
  \addcontentsline{toc}{chapter}{致谢}  
  \addcontentsline{toe}{chapter}{Acknowledgements}  
  \clearpage %  
}
```



模板演示





总结

- ❖ 模板及使用例子下载: <http://pan.xmu.edu.cn/s/OekfvvqWRQc> (osoa)
- ❖ 搜集的一些参考材料: <http://pan.xmu.edu.cn/s/CONfRYfOR0E> (lkzp)
- ❖ CTeX及其论坛: <http://www.ctex.org/> , <http://bbs.ctex.org>
- ❖ 注意事项
 - 只需且只能编译main.tex文件, 且要编译四次才能得到正确输出结果
XeLaTeX → BiBTeX → XeLaTeX → XeLaTeX
 - 编译不通过: 忘记引用宏包, 命令拼写错误, 括号未配对等
 - 处理中文文档时, 一定要记得保存成UTF-8格式, 并用XeLaTeX编译
 - 如果下载的文件WinEdt打开时提示错误, 可在【File】-【Open】, 在弹出的打开对话框中, 右下角【文件名】右侧有一个打开扩展名方式, 默认是Default(*.*)形式, 点击下三角号, 选择UTF-8(*.*)形式。再选择相应的.tex文件打开即可。



Thank you!

