Wind	estimation	for	fuel	management

A Thesis
Presented to
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Author's declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

Author:

Abstract

This thesis is written in and is pages long, including chapters, figures and tables.

Annotatsioon

Lõputöö on kirjutatud Inglise keeles ning sisaldab teksti xx leheküljel, xx peatükki, xx joonist, xx tabelit.

List of abbreviations and terms

Abbreviations of stuff and such. Kable it i guess.

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Introduction

The following thesis looks at the flight logs of Eli Ltd. to assess the fuel economy and the information given to the user. To be written when rest of the paper is finished.

Chapter 1 Problem

First chapters contents.

Chapter 2

State of the art

2.1 Math

TEX is the best way to typeset mathematics. Donald Knuth designed TEX when he got frustrated at how long it was taking the typesetters to finish his book, which contained a lot of mathematics. One nice feature of R Markdown is its ability to read LaTeX code directly.

If you are doing a thesis that will involve lots of math, you will want to read the following section which has been commented out. If you're not going to use math, skip over or delete this next commented section.

2.2 Chemistry 101: Symbols

Chemical formulas will look best if they are not italicized. Get around math mode's automatic italicizing in LaTeX by using the argument \$\mathrm{formula here}\$, with your formula inside the curly brackets. (Notice the use of the backticks here which enclose text that acts as code.)

So, $Fe_2^{2+}Cr_2O_4$ is written $\mathrm{Fe_2^{2+}Cr_2O_4}$ \$.

Exponent or Superscript: O⁻

Subscript: CH₄

To stack numbers or letters as in Fe_2^{2+} , the subscript is defined first, and then the superscript is defined.

Bullet: CuCl \bullet 7H₂O

Delta: Δ

Reaction Arrows: \longrightarrow or $\xrightarrow{solution}$

Resonance Arrows: \leftrightarrow

Reversible Reaction Arrows: \rightleftharpoons

2.2.1 Typesetting reactions

You may wish to put your reaction in an equation environment, which means that LaTeX will place the reaction where it fits and will number the equations for you.

$$C_6H_{12}O_6 + 6O_2 \longrightarrow 6CO_2 + 6H_2O$$
 (2.1)

We can reference this combustion of glucose reaction via Equation (2.1).

2.2.2 Other examples of reactions

$$NH_4Cl_{(s)} \rightleftharpoons NH_{3(g)} + HCl_{(g)}$$

 $MeCH_2Br + Mg \xrightarrow{above} MeCH_2 \bullet Mg \bullet Br$

2.3 Physics

Many of the symbols you will need can be found on the math page http://web.reed.edu/cis/help/latex/math.html and the Comprehensive LaTeX Symbol Guide (http://mirror.utexas.edu/ctan/info/symbols/comprehensive/symbols-letter.pdf).

2.4 Biology

You will probably find the resources at http://www.lecb.ncifcrf.gov/~toms/latex.html helpful, particularly the links to bsts for various journals. You may also be interested in TeXShade for nucleotide typesetting (http://homepages.unituebingen.de/beitz/txe.html). Be sure to read the proceeding chapter on graphics and tables.

Chapter 3 Database generation

How i made the database i did and why.

Chapter 4 Modelling stuff

Eeem.

Chapter 5 The results of it all

The stuff i wanted to do and did.

Conclusion

Welp, thats it.

Appendix A

The First Appendix

This first appendix includes all of the R chunks of code that were hidden throughout the document (using the include = FALSE chunk tag) to help with readibility and/or setup.

In the main Rmd file

```
# This chunk ensures that the thesisdown package is
# installed and loaded. This thesisdown package includes
# the template files for the thesis.
if(!require(devtools))
   install.packages("devtools", repos = "http://cran.rstudio.com")
# Probably should install this from my own repo!!
if(!require(thesisdown))
   devtools::install_github("ismayc/thesisdown")
library(thesisdown)
```

In Chapter ??:

References

- Angel, E. (2000). Interactive computer graphics: A top-down approach with opengl. Boston, MA: Addison Wesley Longman.
- Angel, E. (2001a). Batch-file computer graphics: A bottom-up approach with quicktime. Boston, MA: Wesley Addison Longman.
- Angel, E. (2001b). Test second book by angel. Boston, MA: Wesley Addison Longman.