# The Thesis Title Line 1

# Thesis Title Line 2

The Author

A thesis submitted in

fulfillment of the requirement for the award of the

Degree of Doctor of Philosophy / Bachelor of.../ Master of ...

FACULTY OF WHATEVER

UNIVERSITY WHATEVER

SEPTEMBER 2010

I hereby declare that this thesis entitled "Write The Thesis Title Here" is the result of my own research except as cited in the references. This thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

Signature :

Student : Write the name of the student here

Date : Write the date here

Supervisor : Write supervisor's name here

Co-Supervisor: Write co-supervisor's name here

For my beloved mother and father

# Acknowledgment

Here is the acknowledgment must be written.

Praise to the Almighty...

Thanks to supervisor(s)...

Thanks to sponsor...

Appreciate family...

Thanks to friends...

Author, Place

# Abstract

The abstract should be brief, written in one paragraph and not exceed 300 words. This only demonstrates the paragraph in the abstract.

# Abstrak

Here is the abstract in Malay. Please write the abstract in Malay. Please write the abstract in Malay. Please write the abstract in Malay.

# Contents

# List of Figures

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# List of Appendices

# List of Symbols

| | |
|---|---|
| $\sigma$ | Nominal Stress |
| DVI | Device Independent |

# Chapter 1

# Introduction

The specific use of the word "thesis" in this guide refers to the academic writings submitted in fulfillment for the award of the doctoral degree or the masters by research degree. The word "thesis" is also used in general to refer to the master's project report and research dissertation, which are the documents submitted in partial fulfillment for the award of the degree of master by coursework or by coursework and research as well as the undergraduate project reports.

The Numisheet Conferences is conducted once every three years in location between North America, Europe and Asia. The conference attracts international participation from the metal forming industry and university professors interested in sheet metal forming technology, with a strong emphasis on forming simulation. The Numisheet Conference Proceedings include the latest developments in metal forming technology, which is a rapidly growing and challenging opportunity for application of science to industry.

## 1.1 Background of Study

One of the hallmarks of the conference is the Numisheet Benchmark Study, which is a set of three blind tests prepared one year prior to the conference. Numisheet 2008 Benchmark Problem II is provided by Daimler AG. For this benchmark, the well known S-Rail geometry as shown in Figure 1.1 was chosen. In this benchmark, study the influence of different drawbeads geometries; smooth bead and locking bead on the springback behavior for steel is to be examined using numer-

ical simulation. Here is the example of citation. (Rodriguez *et al.*, 2009; Poirson *et al.*, 2007)

Sheet metal forming is one of the most widely used manufacturing processes for the fabrication of a wide range of products in many industries. The reason behind sheet metal forming gaining a lot attention in modern technology is due to the ease with which metal may be formed into useful shapes by plastic deformation processes.

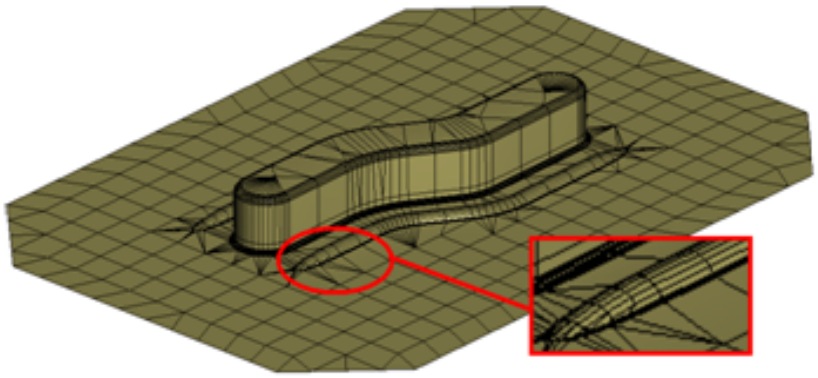

Figure 1.1: S-rail geometry

# Chapter 2

# Literature Review

The sheet metal forming process, in theory, can be viewed as relatively straight forward operation where a sheet of material is plastically deformed into desired shape. Schell (2002) has investigated musical melodies.

## 2.1 Practical Usage

In practice, however, variations in blank dimensions, material properties and environmental conditions make the predictability and reproducibility of a sheet metal forming process difficult. Apart from this, springback properties of sheet metal make it extremely tedious to design appropriate tooling for a given process. Poirson *et al.* (2007) concluded the analysis as shown in Table 2.1.

The explanation of the Hubolt formula

$$f(t) = \int_{s0}^{s1} d\,(x) \tag{2.1}$$

where $x$ is the displacement.

Eq. (2.1) can be derived from another equation as written by

$$\varepsilon_x = \frac{\partial u}{\partial x} \tag{2.2}$$

This is another example

$$[N] = \begin{bmatrix} N_1 & N_2 & N_3 \end{bmatrix}^T \tag{2.3}$$

as mention in Chapter 1.

## 2.2 dded

### 2.2.1 dddd

Table 2.1: Data structure

| node | x | y | z |
|---|---|---|---|
| 1 | | | |
| 2 | | | |

DVI, $\sigma$

# Chapter 3

# Methodology

dsds

bla bla bla

## 3.1 Title

bla bla bla

## 3.2 Another Title

bla bla bla

$$ff \tag{3.1}$$

# Chapter 4

# Title of Chapter 4

bla bla bla

## 4.1 Title

bla bla bla

## 4.2 Another Title

bla bla bla

# Chapter 5

# Title of Chapter 5

bla bla bla bla bla

## 5.1 Title

According to Abdullah (1989) also Creme & Lea (2003), bla bla bla.

## 5.2 Another Title

bla bla bla

# References


Abdullah, M.K. (1989). *Modeling of Swirling Fluidized Bed Hydrodynamic Characteristics*. Ph.D. thesis, Universiti Tun Hussein Onn Malaysia.

Bongers, A.J. (1998). Tactual display of sound properties in electronic musical instruments. *Displays*, 18(3), pp. 129 – 133.

Creme, P. & Lea, M.R. (2003). *Writing at University*. Maiden: Open University Press, 2nd edition.

Poirson, E., Depincae, P. & Petiot, J.F. (2007). User-centered design by genetic algorithms: Application to brass musical instrument optimization. *Engineering Applications of Artificial Intelligence*, 20(4), pp. 511 – 518.

Rodriguez, R., Arteaga, E., Rangel, D., Salazar, R., Vargas, S. & Estevez, M. (2009). Mechanical, chemical and acoustic properties of new hybrid ceramic-polymer varnishes for musical instruments. *Journal of Non-Crystalline Solids*, 355(2), pp. 132 – 140.

Schell, D. (2002). Optimality in musical melodies and harmonic progressions: The travelling musician. *European Journal of Operational Research*, 140(2), pp. 354 – 372.

# APPENDICES

# Appendix A

# Write Title Here

You can see here the equation number is consistent with Appendix numbering system

$$[k^e] = \frac{AE}{L}\begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix} \tag{A.1}$$

## A.1 Section title 1 here

Text text text of first paragraph

Now second paragraph. Bongers (1998)

$$f(x) = 3x^2 + \int_0^{20} 45x^2 \mathrm{d}x \tag{A.2}$$

## A.2 Section title 2 here

Text text text of first paragraph

Now second paragraph

# Appendix B

# Source Code for Initial Model

The following codes are written in LaTeX preamble

```
%======================
% Written by Waluyo Adi Siswanto
% You are allowed to modify this
% in order to meet your requirements
%======================
% this command prints empty date in title page
\date{}

% this command set the paragraph indentation
% if you want to modify change the value 1.5cm to your preference
\setlength{\parindent}{1.5cm}

%This command will change the default Bibliography to References
\AtBeginDocument{\renewcommand{\bibname}{References}}

%The following comands center the heading of chapters and
% chapter entries, the default is on the left
\addtokomafont{chapterentry}{\centering}
\addtokomafont{chapter}{\centering}

% The following commands set the page numbers on the top right
% except in the beginning of chapters
% using fancyhdr package (page layout>heading style->fancy)
\lhead{}
\chead{}
\rhead{\thepage}
```

```
\lfoot{}
\cfoot{}
\rfoot{}
\renewcommand{\headrulewidth}{0pt}

% The following commands set the vertical space before and
   after
% every chapter entry
\renewcommand*{\chapterheadendvskip}{\vspace{2cm}}
\renewcommand*{\chapterheadstartvskip}{\vspace{2.5cm}}

% The following commands set the TOC, LOT and LOF
% this employs tocloft package
\usepackage{tocloft}
\renewcommand{\cftdot}{}
\renewcommand{\cfttoctitlefont}{\hfill\Large\bfseries\
   sffamily}
\renewcommand{\cftaftertoctitle}{\hfill}
\renewcommand{\cftaftertoctitleskip}{2.5cm}
\renewcommand{\cftbeforetoctitleskip}{2.5cm}

\renewcommand{\cftloftitlefont}{\hfill\Large\bfseries\
   sffamily}
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\usepackage{minitoc}
% Redefining automatic label of
% Figure, Table and Eq.
\usepackage{prettyref}
\newrefformat{tab}{Table\,\ref{#1}}
\newrefformat{fig}{Figure\,\ref{#1}}
\newrefformat{eq}{Eq.\,\textup{(\ref{#1})}}
```