# 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 Mechanical and Manufacturing Engineering
Universiti Tun Hussein Onn Malaysia

Ι	hereby	declare	that	the	work	in	this	thesis	is	my	own	except	for	quotat	ions
		and	sum	mari	es wh	ich	n hav	e beer	ı d	uly	ackn	owledg	$\operatorname{ed}$		

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 template already set in single spacing. This only demonstrates the paragraph in the abstract: Numisheet 2011 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 2011 Conference include the latest developments in metal forming technology, which is a rapidly growing and challenging opportunity for application of science to industry. One of the hallmarks of the conference is the Numisheet Benchmark Study.

## **Abstrak**

Here is the abstract in Malay. Please write the abstract in Malay. This template has already set in single spacing for Abstrak.

## Contents

D	eclaration	ii
D	edication	iii
A	cknowledgment	iv
Al	bstract	v
Al	bstrak	vi
1	Introduction	1
	1.1 Background of Study	1
2	Literature Review	3
	2.1 Practical Usage	3
	2.2 dded	4
	2.2.1 dddd	4
3	Methodology	5
4	Title of Chapter 4	6
5	Title of Chapter 5	7
Re	eferences	8

# List of Figures

1.1 R-rail geometry

2

## **List of Tables**

2.1 Data structure 4

#### 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 occur once every three 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

#### numerical simulation. [2, 1]

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 in which the volume and etc.

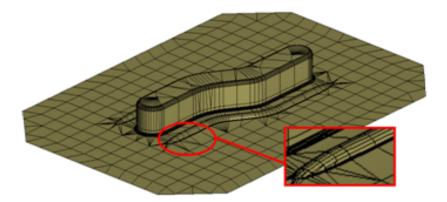


Figure 1.1: R-rail geometry

#### 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. [3]

#### 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. [1]. Figure 2.1 shows.....

The explanation of the Hubolt formula

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

where x is the displacement.

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

$$ffdfd$$
 (2.2)

This is another example

$$dsd\nabla f$$
 (2.3)

as mention in Chapter 2.

## 2.2 dded

#### 2.2.1 dddd

Table 2.1: Data structure

node	X	у	Z
1			
2			

# Methodology

dsds

ff (3.1)

## Title of Chapter 4

bla bla bla

Title of Chapter 5

#### References

- [1] Poirson, E., P. Depincae, and J.-F. Petiot: 2007, 'User-centered design by genetic algorithms: Application to brass musical instrument optimization'. Engineering Applications of Artificial Intelligence 20(4), 511 – 518.
- [2] Rodriguez, R., E. Arteaga, D. Rangel, R. Salazar, S. Vargas, and M. Estevez: 2009, 'Mechanical, chemical and acoustic properties of new hybrid ceramic-polymer varnishes for musical instruments'. *Journal of Non-Crystalline Solids* **355**(2), 132 140.
- [3] Schell, D.: 2002, 'Optimality in musical melodies and harmonic progressions: The travelling musician'. European Journal of Operational Research 140(2), 354-372.