Bachelor Thesis

Marko Stanisic

Department of Informatics

Technical University of Vienna

audited by

Abstract

The invariant observer is an approach to implement an alternative hardware realization of the invariant operation published in the paper **Runtime Verification of Embedded Real Time Systems.** The invariant observer monitors at every clock cycle a signal ϕ from a Runtime Verification Unit and determines whether the signal is in an active state in the last τ clock cycles.

Contents

List of Figures

Chapter 1

Introduction

And this is how I would like to introduce my piece of work ...

blah blah

blah blah

Chapter 2

My First Chapter But Note The Numbering ...

2.1 First Paragraph

And now I begin my first chapter here ...

Here is an equation[1]:

$$CIF: \quad F_0^j(a) = \frac{1}{2\pi\iota} \oint_\gamma \frac{F_0^j(z)}{z-a} dz \tag{2.1}$$

2.2 Second Paragraph

and here I write more ...[1]

2.2.1 sub first paragraph

... and some more ...

Now I would like to cite the following: [2] and [1] and [3].

I would also like to include a picture ...

[1] the notation is explained in the nomenclature section :-)

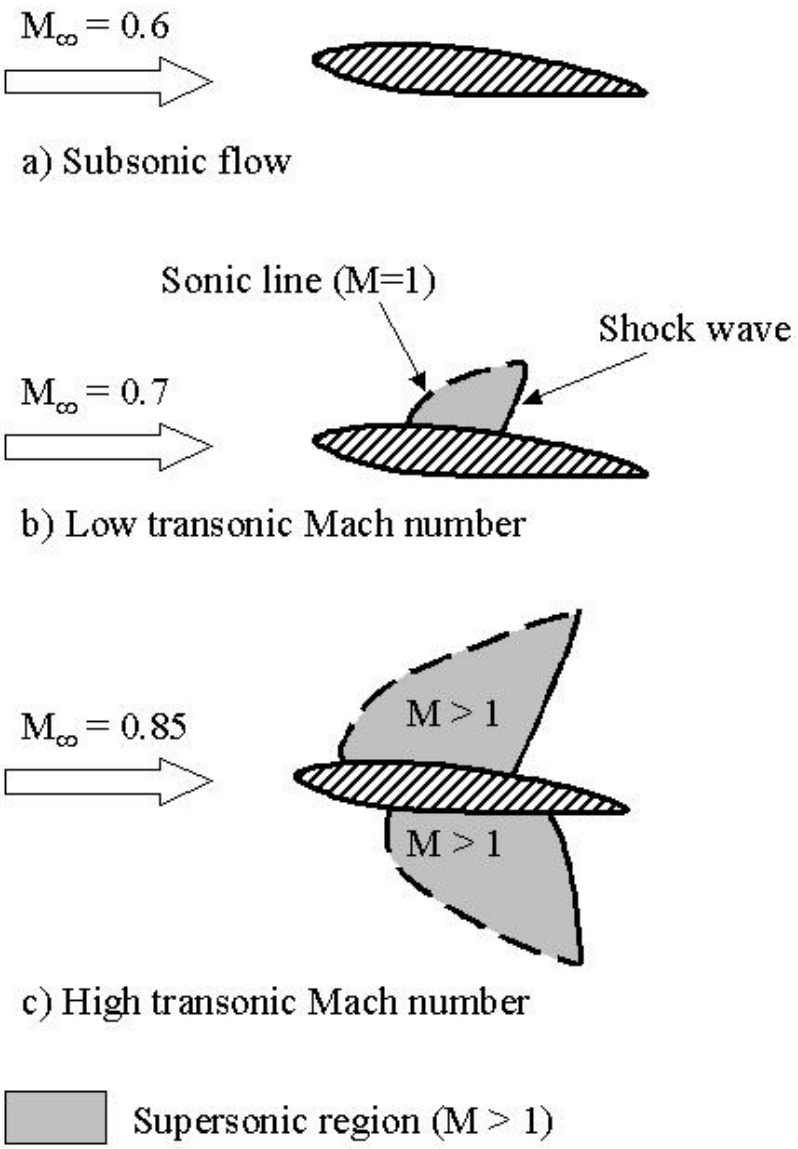

Figure 2.1: Airfoil Picture

So as we have now labelled it we can reference it, like so (2.1) and it is on Page 4. And as we can see, it is a very nice picture and we can talk about it all we want and when we are tired we can move on to the next chapter ...

I would also like to add an extra bookmark in acroread like so ...

Chapter 3

My Second Chapter

3.1 First Section

nd now I begin my second chapter here ...

3.2 Second Section

nd here I write more ...

3.2.1 first subsection in the Second Section

... and some more ...

3.2.2 second subsection in the Second Section

... and some more ...

3.2.3 third subsection in the Second Section

... and some more ...

Chapter 4

My Third Chapter

4.1 First Section of the Third Chapter

And now I begin my third chapter here ...

4.1.1 first subsection in the First Section

... and some more

4.1.2 second subsection in the First Section

... and some more ...

4.1.2.1 first subsub section in the second subsection

... and some more in the first subsub section otherwise it all looks the same doesn't it? well we can add some text to it ...

4.1.3 third subsection in the First Section

... and some more ...

4.1.3.1 first subsub section in the third subsection

... and some more in the first subsub section otherwise it all looks the same doesn't it? well we can add some text to it and some more and some more and some more and some more and some more and some more ...

4.1.3.2 second subsub section in the third subsection

... and some more in the first subsub section otherwise it all looks the same doesn't it? well we can add some text to it ...

4.2 Second Section of the Third Chapter

and here I write more ...

Chapter 5

My Conclusions ...

Here I put my conclusions ...

Appdx A

and here I put a bit of postamble ...

Appdx B

and here I put some more postamble ...

References

[1] Donald E. Knuth. *The TEXbook*. Addison-Wesley, 1984.

[2] Leslie Lamport. *LATEX: A Document Preparation System*. Addison-Wesley, 1986.

[3] W. Rudin. *Functional Analysis*. McGraw-Hill, New York, 1973.