En resa mot Svartåns djupa mörker

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***Abstract*—The abstract goes here.**

I. Introduction

Explain the subject. What was i studying? Why was this topic important to investigate? What did we know about the topic before I did this study? How will this study dvance new knowledge or new ways of understanding?

II. State of the Art

The latest and most sophisticated or advanced stage of a technology or science. State of the art if the foundation for determining the methid and methodlogy.

III. Hypothesis

In scienc, a hypothesis is an idea or explanation that you then tesr through study and experimentation. Outside science, a theory or quess can also be called a hypothesis

IV. Problem formulation

The problm formulation is defined upon hypothesis to define the problem or problems for the thesis

V. Research questions

A research question guides and centers your research. It should be clear and focusd, as well as synthesize multiple sources to present your unque argument. RQ should be furmulat

VI. Hardware

- MyDAQ
- Voltera Printer

VII. Software

- Multisim
- Ultiboard
- Voltera

VIII. Method

How will you test the hypothesis? What methods will be used from the knowledge learned in state of the art?
The PCB was tested using the National Instruments *myDAQ*, by imposing a square wave with following characteristics:

- Constant 5V amplitude.
- Constant 2.5V positive offset.
- Variable frequency $100Hz - 10kHz$
- Variable duty-cycle $10\% - 90\%$

and then measuring the output

IX. Results

What are the results your method have given?

X. Conclusion

Have you provn or disproven the hypothesis? If not, why?

XI. Discussion

XII. Future work

What is the best way to continue the work?

Acknowledgment

References

[1] H. Kopka and P. W. Daly, *A Guide to LaTeX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.