# Bachlor Thesis
# Development of a SMT - Solver for the concurrent learning language 'Conch'

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**Abstract**

In this bachlor thesis there is something.

## 1 Introduction

The SMT-Solver that I wrote and will be discused in this bachlor thesis was initially designed to solve expressions in the programm *conch*. This program is a will be used for the education to teach concurrent programming. In this programm it should be possible to state non trivial expressions, e.g. if process $i$ is in the critical section every other process should have a ticket with a number greater than $i$. Therefore we must be able to make assumptions over quantified terms.
Two solve this problem I implemented an algorithm based on dpll [1] and the algroithm of Shostak [2]

## 2 Foundations

If I wrote something here should be something

## 3 Bibliography

## References

[1] Harald Ganzinger, George Hagen, Robert Nieuwenhuis, Albert Oliveras, and Cesare Tinelli. Dpll(t): Fast decision procedures. pages 175–188. Springer, 2004.

[2] Robert E. Shostak. Deciding combinations of theories. *Journal of the ACM*, 31(1):1–12, January 1984.