#### **Bachelor Thesis**

# Visualizing Dynamic Programming on Tree Decompositions

#### Martin Röbke

matriculation number: 3949819 martin.roebke@tu-dresden.de

Technische Universität Dresden Faculty of Computer Science International Center For Computational Logic

Supervisor: Dr. Johannes Fichte

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#### **Abstract**

The present Bachelor thesis is about a practical and lightweight implementation of visualizing dynamic programming on tree decompositions. I created the python-package tdvisu for the purpose of visualizing, teaching and analyzing the solving process of MSOL-problems using dynamic programming. As reference implementations of dynamic programming on tree decompositions the projects GPUSAT and dpdb were chosen.

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#### 1 Introduction

## 2 Theory

## 3 My Visualization Project

## 4 Implementation in GPUSAT

## 5 Implementation in dpdb

## 6 Summary

### References