Symbolic Parameter Estimation of Continuous-Time Markov Chains

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***Abstract*—This is a placeholder abstract. The whole template is used in semester projects at Aalborg University (AAU).**

I. Introduction

This paper is about improving the runtime of jajapy - a tool for estimating parameters in parametric models.

Markov Chain (MC) - A chain of events described as a sequence of events without knowledge of prior. Hidden Markov Model (HMM) - A markov chain with emission probabilities. Markov Decision Process (MDP) - A markov chain with actions that influence the transitions. Continuous Time Markov Chain - A markov chain with traces that have dwell times as well as label emissions. Baum-Welch algorithm (BW) - Expectation-Maximization algorithm for finding the parameters of a Hidden Markov Model. Algebraic Decision Diagram (ADD) - A data structure of states and binary decisions, also called a Multi-Terminal Binary Decision Diagram (MTBDD).

Acronyms

AAU Aalborg University. 1

Appendix A
Compiling in draft

You can also compile the document in draft mode. This shows todos, and increases the space between lines to make space for your supervisors feedback.