Bakalářská práce

České
vysoké
učení technické
v Praze

F3

Fakulta elektrotechnická
Katedra kybernetiky

Platforma pro kreslení diagramů konečných automatů

Tomáš Hořovský

Školitel: RNDr. Marko Genyk-Berezovskyj
Leden 2019

Poděkování

I thank to my family and my supervisor for support in dire times. . . . TODO: FILL

Prohlášení

Prohlašuji, že jsem předloženou práci vypracoval samostatně a že jsem uvedl veškeré použité informační zdroje v souladu s Metodickým pokynem o dodržování etických principů při přípravě vysokoškolských závěrečných prací.
TODO: EDIT/FILL

Abstrakt

Rozvíjíme . . .

Klíčová slova:

Školitel: RNDr. Marko
Genyk-Berezovskyj
TODO: FILL

Abstract

We develop . . .

Keywords:

Title translation: Finite Automata
Drawing Platform

Contents

Figures   Tables

Chapter 1

Introduction

TODO: FILL

Chapter 2

Motivation and the rest of the world

When I wrote my own material for Automata, Grammars and Language theory, I stumbled upon the problem of visualising automata in the document. I wanted fast and reliable way to draw automaton diagrams in place in code, not having to include image files to the compilation folder. I searched for a suitable way to do so and I found **tikz**. Tikz is a powerful image drawing library that has many features. I tried drawing automaton directly with tikz, but the code was unnecessarily long and tedious to write. After a couple of diagrams I started looking for another option. Then I found a library for tikz called **automata**. It was just what I was looking for. It could draw nodes and edges nicely, while keeping the code simple and clear.

Next problem on the line was to draw these diagrams, so that they are as simple as possible. Mostly eliminating crossing edges did the trick. However the more complex the diagram got, the harder it was to do by hand. I used *Graphviz* to do the layout work for me. Then it was all about the process of converting Graphviz output to the tikz code.

TODO: CONTINUE

Chapter 3

User manual

TODO: FILL

Chapter 4

Details of Implementation

TODO: FILL

Chapter 5

Drawing images details

TODO: FILL

Chapter 6

Examples of usage, practice, problems of testing

TODO: FILL

Chapter 7

What to do next? Looking to the future

TODO: FILL

Chapter 8

Conclusion

Lorep ipsum [1]

Bibliography

[1] J. Doe. *Book on foobar.* Publisher X, 2300.