University of Helsinki
Helsinki Institute for Information Technology
Thesis draft
Author: Jarkko Savela

before TOC

Title Page

Abstract

Acknowledgements

Contents

1 Introduction

2 Probabilistic systems

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

- Describe probabilistic models:

    - DTMC
    - CTMC
    - DTMDP
    - CTMDP
    - (Probabilistic automata)
    - (Markov automata)

- remember to cite references

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3 Logics for Probabilistic systems

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- Define PCTL and LTL as used for PMC

- remember to cite references

- (mention other property description languages)

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4 Algorithmics

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- Describe the algorithms for

  - PCTL + DTMC
  - LTL + DTMC

- (Mention variants for continuous time and non-determinism)

- remember to cite references

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5 Practical relevance

5.1 Applications

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- Mention different applications of PMC

- Cite case studies here

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5.2   Tool Support

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- Mention different tools that exist

- Cite the technical papers, tutorials etc for these

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6   Conclusions and Future Prospects

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- Mention recent research directions

- Cite some fresh papers

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7   References

8   Appendices