



CENTER FOR
MACHINE PERCEPTION



CZECH TECHNICAL
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BACHELOR THESIS

Minimal Problem Solver Generator

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Available at
<http://cmp.felk.cvut.cz/~trutmpav/theses/bsc-pavel-trutman.pdf>

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Text of acknowledgements. . .

Abstract

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Resumé

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Abbreviations

AHA! Some optional explanation before the list. Indentation can be set by the command `\setlength{\AbbrevIndent}{5em}`.

1D	one dimension(al)
2D, 3D, ...	two dimension(al), three dimension(al), two dimension(al), three dimension(al), two dimension(al), three dimension(al), two dimension(al), three dimension(al), ...
AAM	active appearance model
AI	artificial intelligence
ASM	active shape model
B-rep	boundary representation
BBN	Bayesian belief networks

1 Introduction

Here comes introduction.

2 Polynomial system solving

Firstly we review the state of the art algorithms for computing Gröbner basis. Better understanding of these algorithms helps us to more efficiently integrate them into polynomial solving algorithms based on Gröbner basis computation.

2.1 Buchberger's Algorithm

2.2 F4 Algorithm

2.3 F5 Algorithm

3 Automatic generator

3.1 Reimplementation

3.2 Multiple eliminations solver

3.3 Removing unnecessary polynomials

3.4 Matrix partitioning

3.5 F4 strategy

4 Experiments

5 Conclusion