

MASTER'S
THESIS DESCRIPTION

Student:	Juraj Síč
Programme:	Informatics
Field of Study:	Theoretical Informatics
Field guarantor:	prof. RNDr. Jozef Gruska, DrSc. (TEI)
Thesis supervisor:	doc. RNDr. Jan Strejček, Ph.D.
Consultant:	RNDr. Martin Jonáš, Ph.D.
Department:	Department of Computer Science
Title of the thesis/dissertation:	Satisfiability of DQBF Using Binary Decision Diagrams
Title of the thesis in English:	Satisfiability of DQBF Using Binary Decision Diagrams
Description:	The thesis will recall the definition of Dependency Quantified Boolean Formulas (DQBF) and summarize the current algorithms and tools deciding satisfiability of DQBF. The main goal of the thesis is to design and implement a decision procedure for DQBF satisfiability based on Binary Decision Diagrams (BDD). The implementation will be open sourced and the thesis will provide its comparison against the state-of-the-art DQBF solvers using standard benchmarks.
Literature:	Karina Gitina, Ralf Wimmer, Sven Reimer, Matthias Sauer, Christoph Scholl, Bernd Becker: Solving DQBF through quantifier elimination. DATE 2015: 1617-1622.