Master's Thesis Projects in Symbolic Logic, Proof Theory, and Theorem Proving

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Overview

I supervise Master's thesis projects in areas related to symbolic logic, proof theory, and automated reasoning. Students interested in formal methods, non-classical logics, decision procedures, verification, or theorem proving are encouraged to contact me to discuss potential projects.

Research topics can range from foundational studies in logic to practical implementation of reasoning tools. Examples include, but are not limited to:

- Study and implementation of proof calculi for non-classical logics.

- Theoretical investigations of non-classical logics used in computer science and knowledge representation.

- Investigation of decision algorithms, proof search strategies, and complexity results.

- Development of theorem provers for modal or related logics.

- Study and verification (e.g., in Ada/SPARK) of proof transformation algorithms.

Getting in Touch

If you are interested in undertaking a thesis project in any of the areas listed above, or wish to propose a related project of your own, please contact me via email to discuss possible topics:

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- **Office:** APB 2031, Andreas-Pfitzmann-Bau, Fakultät für Informatik, TU Dresden

In your email, please briefly introduce yourself, indicate your degree program, and mention any prior experience in logic, programming, or formal methods.

For further information, including research interests, descriptions of past projects and related resources, please see my research page: `https://sites.google.com/view/timlyon/home?authuser=0`