Development of a Theorem Prover for Proof Schemata Intermediate Report

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The presentation is divided into two parts: in the first part we give basic notion of formula schemata and define calculus for it. Then we present a proof-search algorithm, which constructs a proof schema for a given formula schema. The validity problem is not even semi-decidable, therefore the algorithm cannot be complete.

In the second part we present a graphical interface, called ProofTool, which is used to visualize and manipulate proofs. Besides well-known proof tree representation, we added new interface that represents proofs as circles. This interface is much easier for understanding proof structure.