Using AI for Theorem Proving

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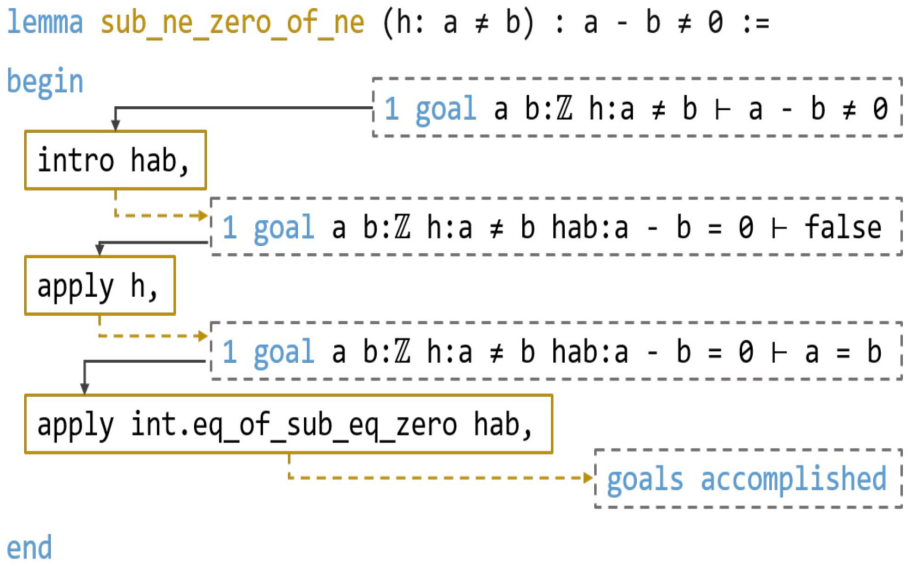
Aim: To use reinforcement learning for improving the performance of theorem prover.

Environment:	Lean
Training Data:	Mathlib
Test Data	MiniF2F
Model:	ByT5

Plans:

- Read the current RL based algorithms used
- Implement the state level value function
- Experiment with new promising algorithms



Generative Language Modeling for Automated Theorem Proving

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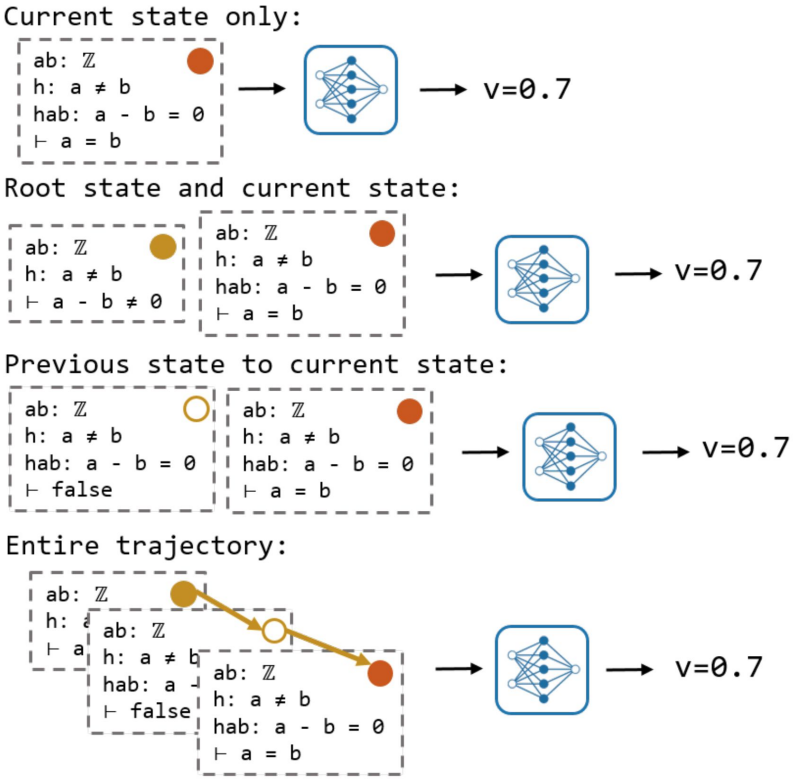

DT-Solver: Automated Theorem Proving with Dynamic-Tree Sampling Guided by Proof-level Value Function

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Formal Mathematics Statement Curriculum Learning

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