

Abstract: Learning Theorem Proving by Example — Implementing JavaRes

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ThEdu'21, 11 July 2021

Abstract Did PyRes achieve its goal of being a sufficient model for learning about how to implement a first-order ATP system? JavaRes is a demonstration prover patterned after PyRes. In this paper we discuss the architecture and data structures of this prover and the experience of one of us implementing the prover, without prior expertise in writing an automated theorem prover prover. We present performance measurements relative to PyRes and other systems. To illustrate the value of JavaRes for learning about theorem proving we also mention the implementation of several features beyond the original PyRes concept.