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Narrowing based inductive proof search. (English) Zbl 1383.03019

Voronkov, Andrei (ed.) et al., Programming logics. Essays in memory of Harald Ganzinger. Berlin: Springer (ISBN 978-3-642-37650-4/pbk). Lecture Notes in Computer Science 7797, 216-238 (2013).

Summary: We present in this paper a narrowing-based proof search method for inductive theorems. It has the specificity to be grounded on deduction modulo and to yield a direct translation from a successful proof search derivation to a proof in the sequent calculus. The method is shown to be sound and refutationally correct in a proof theoretical way.

For the entire collection see [\[Zbl 1259.03008\]](#).

MSC:

- [03B35](#) Mechanization of proofs and logical operations
- [68Q42](#) Grammars and rewriting systems
- [68T15](#) Theorem proving (deduction, resolution, etc.) (MSC2010)

Cited in **3** Documents

Keywords:

[deduction modulo](#); [sequent calculus modulo](#); [induction](#); [Noetherian induction](#); [induction by rewriting](#); [equational reasoning](#); [term rewriting](#)

Software:

[RRL](#); [SPIKE](#)

Full Text: [DOI](#)

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