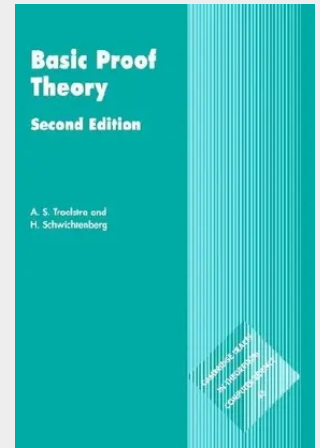


Basic Proof Theory

This introduction to the basic ideas of structural proof theory contains a thorough discussion and comparison of various types of formalization of first-order logic. Examples are given of several areas of application, namely: the metamathematics of pure first-order logic (intuitionistic as well as classical); the theory of logic programming; category theory; modal logic; linear logic; first-order arithmetic and second-order logic. In each case the aim is to illustrate the methods in relatively simple situations and then apply them elsewhere in much more complex settings. There are numerous exercises throughout the text. In general, the only prerequisite is a standard course in first-order logic, making the book ideal for graduate students and beginning researchers in mathematical logic, theoretical computer science and artificial intelligence. For the new edition, many sections have been rewritten to improve clarity, new sections have been added on cut elimination, and solutions to selected exercises have been included.

This introduction to the basic ideas of structural proof theory contains a thorough discussion and comparison of various types of formalization of first-order logic. Examples are given of several areas of application, namely: the metamathematics of pure first-order logic (intuitionistic as well as classical); the theory of logic programming; category theory; modal logic; linear logic; first-order arithmetic and second-order logic. In each case the aim is to illustrate the methods in relatively simple situations and then apply them elsewhere in much more complex settings. There are numerous exercises throughout the text. In general, the only prerequisite is a standard course in first-order logic, making the book ideal for graduate students and beginning researchers in mathematical logic, theoretical computer science and artificial intelligence. For the new edition, many sections have been rewritten to improve clarity, new sections have been added on cut elimination, and solutions to selected exercises have been included.



70,90 €

70,90 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780521779111

Medium: Buch

ISBN: 978-0-521-77911-1

Verlag: Cambridge University Press

Erscheinungstermin: 13.01.2002

Sprache(n): Englisch

Auflage: 2. Auflage 2002

Serie: Cambridge Tracts in Theoretical Computer Science

Produktform: Kartoniert

Gewicht: 697 g

Seiten: 430

Format (B x H): 152 x 229 mm

