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Titolo	A short introduction to intuitionistic logic [[electronic resource] /] / Grigori Mints
Pubbl/distr/stampa	New York, : Kluwer Academic / Plenum Publishers, 2000
ISBN	1-280-20550-4 9786610205509 0-306-46975-8
Edizione	[1st ed. 2000.]
Descrizione fisica	1 online resource (142 p.)
Collana	University series in mathematics
Disciplina	511/.22
Soggetti	Intuitionistic mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intuitionistic Predicate Logic -- Natural Deduction System NJ -- Kripke Models for Predicate Logic -- Systems LJm, LJ -- Proof-Search in Predicate Logic -- Preliminaries -- Natural Deduction for Propositional Logic -- Negative Translation: Glivenko's Theorem -- Program Interpretation of Intuitionistic Logic -- Computations with Deductions -- Coherence Theorem -- Kripke Models -- Gentzen-type Propositional System LJpm -- Topological Completeness -- Proof-search -- System LJp -- Interpolation Theorem.
Sommario/riassunto	Intuitionistic logic is presented here as part of familiar classical logic which allows mechanical extraction of programs from proofs. To make the material more accessible, basic techniques are presented first for propositional logic; Part II contains extensions to predicate logic. This material provides an introduction and a safe background for reading research literature in logic and computer science as well as advanced monographs. Readers are assumed to be familiar with basic notions of first order logic. One device for making this book short was inventing new proofs of several theorems. The presentation is based on natural deduction. The topics include programming interpretation of intuitionistic logic by simply typed lambda-calculus (Curry-Howard isomorphism), negative translation of classical into intuitionistic logic, normalization of natural deductions, applications to category theory,

Kripke models, algebraic and topological semantics, proof-search methods, interpolation theorem. The text developed from material for several courses taught at Stanford University in 1992-1999.
