Record Nr. UNISA996466227503316 Bidirectional Transformations [[electronic resource]]: International **Titolo** Summer School, Oxford, UK, July 25-29, 2016, Tutorial Lectures // edited by Jeremy Gibbons, Perdita Stevens Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 **ISBN** 3-319-79108-7 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (IX, 189 p.) Programming and Software Engineering;; 9715 Collana Disciplina 511.326 Soggetti Software engineering Computer logic Management information systems Computer science Database management Software Engineering/Programming and Operating Systems Logics and Meanings of Programs Management of Computing and Information Systems Database Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Introduction to Bidirectional Transformations -- An Introduction to Triple Graph Grammars as an Implementation of the Delta-Lens Framework -- Modular Edit Lenses -- Principles and Practice of Bidirectional Programming in BiGUL -- Engineering Bidirectional Transformations. Sommario/riassunto Bidirectional transformations (BX) are means of maintaining consistency between multiple information sources: when one source is edited, the others may need updating to restore consistency. BX have applications in databases, user interface design, model-driven development, and many other domains. This volume represents the lecture notes from the Summer School on Bidirectional Transformations, held in Oxford, UK, in July 2016. The school was one of the final activities on the project "A Theory of Least Change for Bidirectional Transformations", running at

the University of Oxford and the University of Edinburgh from 2013 to 2017 and funded by the UK Engineering and Physical Sciences Research Council. The five chapters included in this volume are a record of most of the material presented at the summer school. After a comprehensive introduction to bidirectional transformations, they deal with triple graph grammars, modular edit lenses, putback-based bidirectional programming, and engineering of bidirectional transformations.