1.	Record Nr.	UNINA9910585962103321
	Titolo	Foundations of probabilistic programming / / edited by Gilles Barthe, Joost-Pieter Katoen, Alexandra Silva [[electronic resource]]
	Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2021
	ISBN	1-108-80574-4 1-108-77075-4
	Descrizione fisica	1 online resource (xiv, 568 pages) : digital, PDF file(s)
	Disciplina	001.642
	Soggetti	Computer programming Probabilities - Data processing
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Title from publisher's bibliographic system (viewed on 20 Nov 2020).
	Sommario/riassunto	What does a probabilistic program actually compute? How can one formally reason about such probabilistic programs? This valuable guide covers such elementary questions and more. It provides a state-of-the-art overview of the theoretical underpinnings of modern probabilistic programming and their applications in machine learning, security, and other domains, at a level suitable for graduate students and non-experts in the field. In addition, the book treats the connection between probabilistic programs and mathematical logic, security (what is the probability that software leaks confidential information?), and presents three programming languages for different applications: Excel tables, program testing, and approximate computing. This title is also available as Open Access on Cambridge Core.