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Titolo	Domain-Specific Languages in R : Advanced Statistical Programming // by Thomas Mailund
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Descrizione fisica	1 online resource (257 pages)
Disciplina	005.13
Soggetti	Programming languages (Electronic computers) Artificial intelligence Computer programming Mathematical statistics Big data R (Computer program language) Programming Languages, Compilers, Interpreters Artificial Intelligence Programming Techniques Probability and Statistics in Computer Science Big Data
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Introduction -- 2. Matrix expressions -- 3. Components of a programming language -- 4. Functions, classes and operators -- 5. Parsing and manipulating expressions -- 6. Lambda expressions -- 7. Environments and Expressions -- 8. Tidy evaluation -- 9. List comprehension -- 10. Continuous-Time Markov chains -- 11. Pattern matching -- 12. Dynamic programming -- 13. Conclusion.
Sommario/riassunto	Gain an accelerated introduction to domain-specific languages in R, including coverage of regular expressions. This compact, in-depth book shows you how DSLs are programming languages specialized for a particular purpose, as opposed to general purpose programming languages. Along the way, you'll learn to specify tasks you want to do

in a precise way and achieve programming goals within a domain-specific context. Domain-Specific Languages in R includes examples of DSLs including large data sets or matrix multiplication; pattern matching DSLs for application in computer vision; and DSLs for continuous time Markov chains and their applications in data science. After reading and using this book, you'll understand how to write DSLs in R and have skills you can extrapolate to other programming languages. You will: Program with domain-specific languages using R Discover the components of DSLs Carry out large matrix expressions and multiplications Implement metaprogramming with DSLs Parse and manipulate expressions .
