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Disciplina	005.133
Soggetti	Python (Computer program language) Ontologies (Information retrieval) Computer programming
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Note generali	Includes index.
Nota di contenuto	Chapter 1: Introduction -- Chapter 2: Python Language: Adopt a Snake! -- Chapter 3: OWL Ontologies -- Chapter 4: Accessing Ontologies in Python -- Chapter 5: Creating and Modifying Ontologies in Python -- Chapter 6: Constructs, Restrictions, Class Properties -- Chapter 7: Automatic Reasoning -- Chapter 8: Annotations, Multilingual Texts and Full Text Search -- Chapter 9: Using Medical Terminologies with PyMedTermino and UMLS -- Chapter 10: Mixing Python and OWL -- Chapter 11: Working with RDF Triples and Worlds.
Sommario/riassunto	Use ontologies in Python, with the Owlready2 module developed for ontology-oriented programming. You will start with an introduction and refresher on Python and OWL ontologies. Then, you will dive straight into how to access, create, and modify ontologies in Python. Next, you will move on to an overview of semantic constructs and class properties followed by how to perform automatic reasoning. You will also learn about annotations, multilingual texts, and how to add Python methods to OWL classes and ontologies. Using medical terminologies as well as direct access to RDF triples is also covered. Python is one of the most used programming languages, especially in the biomedical field, and formal ontologies are also widely used. However, there are limited resources for the use of ontologies in Python. Owlready2,

downloaded more than 60,000 times, is a response to this problem, and this book is the first one on the topic of using ontologies with Python. You will: Use Owlready2 to access and modify OWL ontologies in Python Publish ontologies on dynamic websites Perform automatic reasoning in Python Use well-known ontologies, including DBpedia and Gene Ontology, and terminological resources, such as UMLS (Unified Medical Language System) Integrate Python methods in OWL ontologies.
