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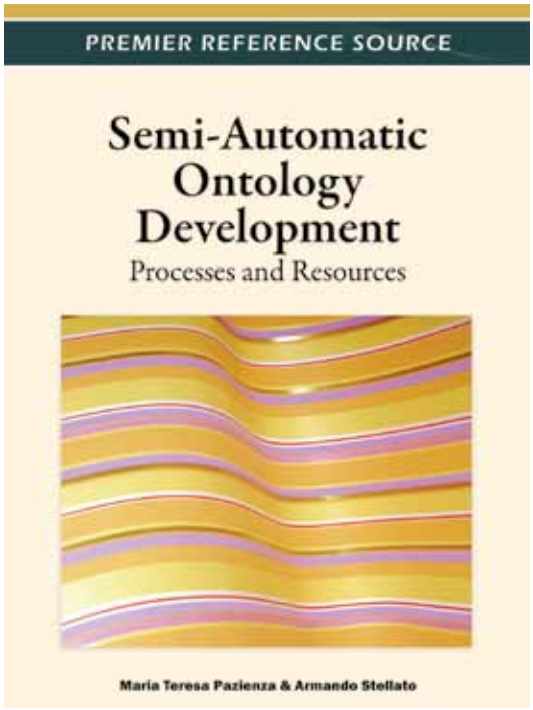
# Semi-Automatic Ontology Development: Processes and Resources

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The exploitation of theoretical results in knowledge representation, language standardization by W3C and data publication initiatives such as Linked Open Data have given a level of concreteness to the field of ontology research. In light of these recent outcomes, ontology development has also found its way to the forefront, benefiting from years of R&D on development tools.

**Semi-Automatic Ontology Development: Processes and Resources** includes state-of-the-art research results aimed at the automation of ontology development processes and the reuse of external resources becoming a reality, thus being of interest for a wide and diversified community of users. This book provides a thorough overview on the current efforts on this subject and suggests common directions for interested researchers and practitioners.

## Topics Covered:

- Data Mining and Ontology Population
- Interoperability between Tools
- Knowledge Acquisition and Data Entry
- Knowledge Engineering
- Language Engineering
- Linguistic Knowledge Acquisition
- Ontology Development
- Ontology Engineering Frameworks
- Ontology Learning
- Ontology Population by Text Processing

**Market:** This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal forclassroom use.

**Maria Teresa Pazienza** is currently full Professor of Artificial Intelligence at the Engineering Faculty of the University of Roma "Tor Vergata," where she founded dedicated curricula on AI both at degree and doctoral levels. She coordinates research and development activities on Artificial Intelligence, Knowledge Representation and Management, and Natural Language Processing at the Department of Enterprise Engineering, where she founded the ART Laboratory in 1988 (). Her areas of expertise include education, research, system development, and user applications of AI technologies (natural language processing, information extraction, conceptual knowledge engineering, applied ontologies, knowledge-based systems, linguistic resources production, linguistic agents, semantic Web). She is author/co-author of more than 150 scientific publications. Professor Pazienza cooperates with several research groups, international institutions, and companies for NLP research and application programs. In the context of European consortia/projects, she has been (and currently is) responsible for the activities carried out at the University of Roma "Tor Vergata." She is reviewer and evaluator for the European Community, for the Danish Council for Strategic Research, for the Science Foundation Ireland, for Chile Superior Council of the National Fund for Scientific and Technological Development, and for the Italian Ministry of University. In 2010 she received the IBM Faculty Award. She is on the editorial board of a few international journals (*Journal of Terminology, Cognitive Processing, and Applied Ontology*), in the scientific committee of CERTIA (academic consortium for cognitive science and applied AI technologies), and participates in the scientific committees of several international conferences on AI. Professor Pazienza is director of the Unit of Roma Tor Vergata University for CINI Consortium, and is in the Steering Committee of ESA (European Space Agency), ESRIN, and Roma Tor Vergata University Convention.

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