

A Rule Based Language For Web Data Management

The 2008 International Symposium on Rule Interchange and Applications (RuleML th 2008), collocated in Orlando, Florida, with the 11 International Business Rules – rum, was the premier place to meet and to exchange ideas from all fields of rules te– nologies. The aim of RuleML 2008 was both to present new and interesting research results and to show successfully deployed rule-based applications. This annual sym– sium is the flagship event of the Rule Markup and Modeling Initiative (RuleML). The RuleML Initiative (www.ruleml.org) is a non-profit umbrella organization of several technical groups organized by representatives from academia, industry and government working on rule technologies and applications. Its aim is to promote the study, research and application of rules in heterogeneous distributed environments such as the Web. RuleML maintains effective links with other major international societies and acts as intermediary between various ‘specialized’ rule vendors, appli– tions, industrial and academic research groups, as well as standardization efforts from, for example, W3C, OMG, and OASIS. Leverage the power of machine learning and deep learning to extract information from text data About This Book Implement Machine Learning and Deep Learning techniques for efficient natural language processing Get started with NLTK and implement NLP in your applications with ease Understand and interpret human languages with the power of text analysis via Python Who This Book Is For This book is intended for Python developers who wish to start with natural language processing and want to make their applications smarter by implementing NLP in them. What You Will Learn Focus on Python programming paradigms, which are used to develop NLP applications Understand corpus analysis and different types of data attribute. Learn NLP using Python libraries such as NLTK, Polyglot, Spacy, Stanford CoreNLP and so on Learn about Features Extraction and Feature selection as part of Features Engineering. Explore the advantages of vectorization in Deep Learning. Get a better understanding of the architecture of a rule-based system. Optimize and fine-tune Supervised and Unsupervised Machine Learning algorithms for NLP problems. Identify Deep Learning techniques for Natural Language Processing and Natural Language Generation problems. In Detail This book starts off by laying the foundation for Natural Language Processing and why Python is one of the best options to build an NLP-based expert system with advantages such as Community support, availability of frameworks and so on. Later it gives you a better understanding of available free forms of corpus and different types of dataset. After this, you will know how to choose a dataset for natural language processing applications and find the right NLP techniques to process sentences in datasets and understand their structure. You will also learn how to tokenize different parts of sentences and ways to analyze them. During the course of the book, you will explore the semantic as well as syntactic analysis of text. You will understand how to solve various ambiguities in processing human language and will come across various scenarios while performing text analysis. You will learn the very basics of getting the environment ready for natural language processing, move on to the initial setup, and then quickly understand sentences and language parts. You will learn the power of Machine Learning and Deep Learning to extract information from text data. By the end of the book, you will have a clear understanding of natural language processing and will have worked on multiple examples that implement NLP in the real world. Style and approach This book teaches the readers various aspects of natural language Processing using NLTK. It takes the reader from the basic to advanced level in a simple way.

Adventures in Rule-Based Programming is a fun introduction to writing applications using CLIPS, a popular rule-based programming language written in C. Originally developed at NASA, CLIPS has been in use for over thirty-five years. CLIPS and the CLIPS source code are available for free. In this tutorial you'll learn the basic concepts of rule-based programming, where rules are used to specify the logic of what must be accomplished, but an inference engine determines when rules are applied. You'll incrementally create a fully functional text adventure game, and in the process, learn how to write, organize, debug, test, and deploy CLIPS code.

*A self-contained tutorial on **Z** for working programmers discussing practical ways to apply formal methods in real projects, first published in 1997.*

A CLIPS Tutorial

A Modern Approach

9 real-world AI projects leveraging machine learning and deep learning with TensorFlow and Keras

היחידות 24.4.75 גרעין ונויט סטיב ועלוקות תומארה

Logical Foundations for Rule-Based Systems

Developing a Rule-based Expert System with C Programming Language

Pathways to Institutional Improvement with Information Technology in Educational Management

Artificial intelligence, or AI, is largely an experimental science—at least as much progress has been made by building and analyzing programs as by examining theoretical questions. MYCIN is one of several well-know programs that embody some intelligence and provide data on the extent to which intelligent behavior can be programmed. As with other AI programs, its development was slow and not always in a forward direction. The book shares the results of nearly a decade of work, the experiments performed, and present a coherent picture of the work. It presents a critical analysis of several pieces of related research, performed by a large number of scientists. The whole field of AI will benefit from detailed, retrospective examinations of experiments, for this is the way the scientific foundations of the field will gradually be defined. This is the reason this analysis of the MYCIN experiments is being offered to readers.

This book constitutes the refereed proceedings of the 5th International Symposium on Rules, RuleML 2011 - Europe, held in Barcelona, Spain, in July 2011 - collocated with the 22nd International Joint Conference on Artificial Intelligence, IJCAI 2011. It is the first of two RuleML events that take place in 2011. The second RuleML Symposium - RuleML 2011 - America - will be held in Fort Lauderdale, FL, USA, in November 2011. The 18 revised full papers, 8 revised short papers and 3 invited track papers presented together with the abstracts of 2 keynote talks were carefully reviewed and selected from 58 submissions. The papers are organized in the following topical sections: rule-based distributed/multi-agent systems; rules, agents and norms; rule-based event processing and reaction rules; fuzzy rules and uncertainty; rules and the semantic Web; rule learning and extraction; rules and reasoning; and rule-based applications.

Implement machine learning and deep learning methodologies to build smart, cognitive AI projects using Python Key FeaturesA go-to-guide to help you master AI algorithms and conceptsA real-world projects tackling different challenges in healthcare, e-commerce, and surveillanceUse TensorFlow, Keras, and other Python libraries to implement smart AI applicationsBook Description This book will be a perfect companion if you want to build insightful projects from leading AI domains using Python. The book covers detailed implementation of projects from all the core disciplines of AI. We start by covering the basics of how to create smart systems using machine learning and deep learning techniques. You will assimilate various neural network architectures such as CNN, RNN, LSTM, to solve critical new world challenges. You will learn to train a model to detect diabetic retinopathy conditions in the human eye and create an intelligent system for performing a video-to-text translation. You will use the transfer learning technique in the healthcare domain and implement style transfer using GANs. Later you will learn to build AI-based recommendation systems, a mobile app for sentiment analysis and a powerful chatbot for carrying customer services. You will implement AI techniques in the cybersecurity domain to generate Captchas. Later you will train and build autonomous vehicles to self-drive using reinforcement learning. You will be using libraries from the Python ecosystem such as TensorFlow, Keras and more to bring the core aspects of machine learning, deep learning, and AI. By the end of this book, you will be skilled to build your own smart models for tackling any kind of AI problems without any hassle. What you will learnBuild an intelligent machine translation system using seq-2-seq neural translation machinesCreate AI applications using GAN and deploy smart mobile apps using TensorFlowTranslate videos into text using CNN and RNNImplement smart AI Chatbots, and integrate and extend them in several domainsCreate smart reinforcement, learning-based applications using Q-LearningBreak and generate CAPTCHA using Deep Learning and Adversarial LearningWho this book is for This book is intended for data scientists, machine learning professionals, and deep learning practitioners who are ready to extend their knowledge and potential in AI. If you want to build real-life smart systems to play a crucial role in every complex domain, then this book is what you need. Knowledge of Python programming and a familiarity with basic machine learning and deep learning concepts are expected to help you get the most out of the book

The specification of a human-computer interface requires a language in which that interface is expressed. Such a language should have a number of properties: (1) It should not be so syntactically complex that programming nonspecialists who must author dialogues have difficulty learning and using it. (2) It must be expressive and concise so that complicated interfaces can have a simple definition. (3) It ought to model human reasoning processes so that unnecessary formalisms and constructs are not required of the dialogue author. A number of types of languages are available for specifying dialogues, including procedural languages, and rule-based languages. This report describes an implementation of a rule-based language related to PROLOG for the specification of human-computer interfaces. It is based not upon von Neumann computer architectures but rather upon Post production systems or Markov algorithms, which are the foundations of computer science.

Intelligent Systems

Rules and Rule Markup Languages for the Semantic Web

Fourth International Conference, RR 2010, Bressanone/Brixen, Italy, September 22-24, 2010. Proceedings

A Rule Based Approach to Program Development

The Way of Z

Programming Expert Systems in OPS5

A Philosophical Examination of Rule-Based Decision-Making in Law and in Life

This book constitutes the refereed proceedings of the International RuleML Symposium, RuleML 2011-America, held in Fort Lauderdale, FL, USA, in November 2011 - collocated with the 22nd International Joint Conference on Artificial Intelligence, IJCAI 2011. It is the second of two RuleML events that take place in 2011. The first RuleML Symposium, RuleML 2011-Europe, has been held in Barcelona, Spain, in July 2011. The 12 full papers, 5 short papers and 5 invited track and position papers presented together with 3 keynote speeches were carefully reviewed and selected from numerous submissions. The accepted papers address a wide range of rules, semantic technology, and cross-industry standards, rules and automated reasoning, rule-based event processing and reaction rules, vocabularies, ontologies and business rules, cloud computing and rules, clinical semantics and rules.

The leading edge of computer science research is notoriously 7ckle. New trends come and go with alarming and unfailing regularity. In such a rapidly changing 7eld, the fact that research interest in a subject lasts more than a year is highly of note. The fact that, after 7ve years, interest not only remains, but actually continues to grow is highly unusual. As 1998 marked the 7th birthday of the International Workshop on Agent Theories, Architectures, and Languages (ATAL), it seemed appropriate for the organizers of the original workshop to comment on this remarkable growth, and re ect on how the 7eld has developed and matured. The 7rst ATAL workshop was co-located with the Eleventh Artificial Intelligence (ECAI-94), which was held in Amsterdam. The fact that we chose an AI conference to co-locate with is telling: at that time, we expected most researchers with an interest in agents to come from the AI community. The workshop, which was planned over the summer of 1993, attracted 32 submissions, and was attended by 55 people. ATAL was the largest workshop at ECAI-94, and the clear focus on building a community around the ATAL workshopsimple. The ATAL-94 proceedings were formally published in January 1995 under the title Intelligent Agents, and included an extensive review article, a glossary, a list of key agent systems, and — unusually for the proceedings of an academic workshop — a full subject index. The highest cited and production value embodied by the ATAL-94 proceedings appear to have been recognized by the community, and resulted in ATAL proceedings being the most successful sequence of books published in Springer-Verlag’s Lecture Notes in Artificial Intelligence series.

This book constitutes the refereed proceedings of the 10th International Conference on Web Reasoning and Rule Systems, RR 2016, held in Aberdeen, Scotland, UK, in September 2016. The 10 full papers and 3 technical communications presented were carefully reviewed and selected from 17 submissions. Extensions and adaptations of classical rule-based languages have found their application in a range of areas, such as ontologies for the semantic web, querying web data, semantic data management, common-sense reasoning on the web

A rule based transformational model for program development and a meta-tool based on the above model is presented. The meta-tool can be instantiated to create various program development tools such as tools for building reusable software components, language directed editors, language to language translators, program instrumentation, structured document generator, and adaptive language based prettyprinters. This new rule based approach has two important features: 1) it is language independent and can be applied to various languages, and 2) provides a powerful escape mechanism for extending the semantics of the rules. Instances of the meta-tool for restructuring source programs for building abstract components and their refinement to concrete instances, source-to-source translation, and source contraction and expansion tools for improving readability and understanding are described.

Rule Technologies. Research, Tools, and Applications

Rule-Based Reasoning, Programming, and Applications

Rule-Based Programming for Human-Computer Interface

10th International Symposium, RuleML 2016, Stony Brook, NY, USA, July 6-9, 2016. Proceedings

Rule-Based Natural Language Processing Methods

Python Natural Language Processing

Rule-Based Programming

This book constitutes the refereed proceedings of the 9th International RuleML Symposium, RuleML 2015, held in Berlin, Germany, in August 2015. The 25 full papers, 4 short papers, 2 full keynote papers, 2 invited research track overview papers, 1 invited paper, 1 invited abstracts presented were carefully reviewed and selected from 63 submissions. The papers cover the following topics: general RuleML track; complex event processing track, existential rules and datalog/– track; legal rules and reasoning track; rule learning track; industry track.

This book constitutes the refereed proceedings of the Third International Workshop on Rules and Rule Markup Languages for the Semantic Web, RuleML 2004, held in Hiroshima, Japan, in November 2004, together with ISWC 2004. The 11 revised full papers presented together with 2 invited papers and 5 tool presentation abstracts were carefully reviewed and selected from 25 submissions. Among the topics addressed are nonmonotonic rule systems, rule learning for feature extraction, logic reasoners for the Semantic Web, deductive RDF rule languages, description logic programs, defeasible description logics, conceptual logic programs, OWL inferencing, and Semantic Web reasoning.

The book presents logical foundations for rule-based systems. An attempt has been made to provide an in-depth discussion of logical and other aspects of such systems, including languages for knowledge representation, inference mechanisms, inference control, design and verification. The ultimate goal was to provide a deeper theoretical insight into the nature of rule-based systems and put together the most complete presentation including details so frequently skipped in typical textbooks. The book may be useful to potentially wide audience, but it is aimed at providing specific knowledge for graduate, post-graduate and Ph.D. students, as well as knowledge engineers and research workers involved in the domain of AI. It also constitutes a summary of the Author’s research and experience gathered through several years of his research work.

This dissertation, "A Rule-based Analysis System for Chinese Sentences" by ??, Bik, Lum, was obtained from The University of Hong Kong (Pokfulam, Hong Kong) and is being sold pursuant to Creative Commons: Attribution 3.0 Hong Kong License. The content of this dissertation has not been altered in any way. We have altered the formatting in order to facilitate the ease of printing and reading of the dissertation. All rights not granted by the above license are retained by the author. DOI: 10.5353/th_b3120876 Subjects: Chinese language - Data processing Rule-based programming Parsing (Computer grammar)

Practical Aspects of Declarative Languages

Rule – Based Modeling and Computing on the Semantic Web

??? ?????? ?????? ?????? ????

Rule Representation, Interchange and Reasoning on the Web

9th International Symposium, RuleML 2015, Berlin, Germany, August 2–5, 2015, Proceedings

IFIP TC3/WG3.7 Fourth International Working Conference on Information Technology in Educational Management July 27–31, 2000, Auckland, New Zealand

5th International Symposium, RuleML 2011 – Europe, Barcelona, Spain, July 19–21, 2011, Proceedings

New Zealand schools have experienced unprecedented change during the last decade. Radical restructuring of the framework for both curriculum and qualifications followed major movement towards self-management in 1989. The curriculum framework, consisting of seven essential learning areas, has been progressively introduced with completion not expected until 2002. The new Qualifications Framework, based on unit standards, was launched in 1994. The introduction of unit standards signalled an emphatic movement towards the use of internal assessment for awarding qualifications at the school level. Each school had to define and describe the outcomes and the performance criteria that would be used to determine whether or not the standard had been achieved. Approximately five to eight standards would be used for each full year course and each standard had a number of credits associated with it. The plan, which has since been modified, was for these credits to contribute to a National Certificate of Educational Achievement, at years 12 and 13, and other, subject specific, National Certificates.

Secondary schools were faced with the task of recording and reporting 1 unit standard results to the New Zealand Qualifications Authority . This, by itself, was not a major issue as the significant suppliers of CSIS had modules available which satisfied this need. At this time a model was being presented to school audiences demonstrating how the recording, reporting and evaluation of assessment data, relating to the curriculum framework, could be relatively straight forward IF there was a common assessment ‘currency’ across the school. This model was converted into software form for demonstration purposes.

This book constitutes the refereed proceedings of the 12th International Symposium on Practical Aspects of Declarative Languages, PADL 2010, held in Madrid, Spain, in January 2010, collocated with POPL 2010, the Symposium on Principles of Programming Languages. The 22 revised full papers presented together with 2 invited talks were carefully reviewed and selected from 58 submissions. The volume features original work emphasizing novel applications and implementation techniques for all forms of clarative concepts, including functions, relations, logic, and constraints. The papers address all current aspects of declarative programming; they are organized in topical sections on non-monotonic reasoning - answer set programming, types, parallelism and distribution, code quality assurance, domain specific languages, programming aids, constraints, and tabling - agents.

RuleML 2005 was the 7rst international conference on rules and rule markup languages for the Semantic Web, held in conjunction with the International Semantic Web C-ference (ISWC) at Galway, Ireland. With the success of the RuleML workshop series came the need for extended research and applications topics organized in a conference format. RuleML 2005 also accommodated the 7rst Workshop on OWL: Experiences and Directions. Rules are widely recognized to be a major part of the frontier of the Semantic Web, and critical to the early adoption and application of knowledge-based techniques in -business, especially enterprise integration and B2B e-commerce. This includes kno- edge representation (KR) theory and algorithms; markup languages based on such KR, engines, translators, and other tools; relationships to standardization efforts; and, not least, applications. Interest and activity in the area of rules for the Semantic Web has grown rapidly over the last 7ve years. The RuleML 2005 Conference was aimed to be this year’s premiere scienti? conference on the topic. It continued in topic, leadership, and collaboration with the previous series of three highly successful annual inter- tional workshops (RuleML 2004, RuleML 2003 and RuleML 2002). The theme for RuleML 2005 was rule languages for reactive and proactive rules, complex event p- cessing, and event-driven rules, to support the emergence of Semantic Web applications. Special highlights of the RuleML 2005 conference included the keynote address by Sir Tim Berners- Lee, Director of W3C.

Computational intelligence is a well-established paradigm, where new theories with a sound biological understanding have been evolving. The current experimental systems have many of the characteristics of biological computers (brains in other words) and are beginning to be able to perform a variety of tasks that are difficult or impossible to do with conventional computers. As evident, the ultimate achievement in this field would be to mimic or exceed human cognitive capabilities including reasoning, recognition, creativity, emotions, understanding, learning and so on. This book comprising of 17 chapters offers a step-by-step introduction (in a chronological order) to the various modern computational intelligence tools used in practical problem solving. Starting with different search techniques including informed and uninformed search, heuristic search, minimax, alpha-beta pruning methods, evolutionary algorithms and swarm intelligent techniques; the authors illustrate the design of knowledge-based systems and advanced expert systems, which incorporate uncertainty and fuzziness. Machine learning algorithms including decision trees and artificial neural networks are presented and finally the fundamentals of hybrid intelligent systems are also depicted. Academics, scientists as well as engineers engaged in research, development and application of computational intelligence techniques, machine learning and data mining would find the comprehensive coverage of this book invaluable.

First International Conference, RuleML 2005, Galway, Ireland, November 10-12, 2005, Proceedings

For Turkish

Intelligent Agents V: Agents Theories, Architectures, and Languages

Semantic Mashups

Rule Interchange and Applications

Handbook on Ontologies

A Rule Based Computer Aided Design System

Software -- Programming Techniques.

An ontology is a formal description of concepts and relationships that can exist for a community of human and/or machine agents. The notion of ontologies is crucial for the purpose of enabling knowledge sharing and reuse. The Handbook on Ontologies provides a comprehensive overview of the current status and future prospectives of the field of ontologies considering ontology languages, ontology engineering methods, example ontologies, infrastructures and technologies for ontologies, and how to bring this all into ontology-based infrastructures and applications that are among the best of their kind. The field of ontologies has tremendously developed and grown in the five years since the first edition of the “Handbook on Ontologies”. Therefore, its revision includes 21 completely new chapters as well as a major re-working of 15 chapters transferred to this second edition.

This book constitutes the refereed proceedings of the 10th International RuleML Symposium, RuleML 2016, held in New York, NY, USA during July 2016. The 19 full papers, 1 short paper, 2 keynote abstracts, 2 invited tutorial papers, 1 invited standard paper, presented were carefully reviewed and selected from 36 submissions. RuleML is a leading conference aiming to build bridges between academia and industry in the field of rules and its applications, especially as part of the semantic technology stack. It is devoted to rule-based programming and rule-based systems including production rules systems, logic programming rule engines, and business rule engines and business rule management systems, Semantic Web rule languages and rule standards and technologies, and research on inference rules, transformation rules, decision rules, and ECA rules.

As we stand at the precipice of the twenty first century the ability to capture and transmit copious amounts of information is clearly a defining feature of the human race. In order to increase the value of this vast supply of information we must develop means for effectively processing it. Newly emerging disciplines such as Information Engineering and Soft Computing are being developed in order to provide the tools required. Conferences such as the International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems (IPMU) are being held to provide forums in which researchers can discuss the latest developments. The recent IPMU conference held at La Sorbonne in Paris brought together some of the world’s leading experts in uncertainty and information fusion. In this volume we have included a selection of papers from this conference. What should be clear from looking at this volume is the number of different ways that are available for representing uncertain information. This variety in representational frameworks is a manifestation of the different types of uncertainty that appear in the information available to the users. Perhaps, the representation with the longest history is probability theory. This representation is best at addressing the uncertainty associated with the occurrence of different values for similar variables. This uncertainty is often described as randomness. Rough sets can be seen as a type of uncertainty that can deal effectively with lack of specificity, it is a powerful tool for manipulating granular information.

Rule-based Expert Systems

Intelligent Reuse of Web Resources

5th International Workshop, ATAL'98, Paris, France, July 4-7, 1998, Proceedings

A Rule-Based Analysis System for Chinese Sentences

Information, Uncertainty and Fusion

Open Solutions and Approaches

Rule-Based Systems in Java

Rule-Based Programming is a broad presentation of the rule-based programming method with many example programs showing the strengths of the rule-based approach. The rule-based approach has been used extensively in the development of artificial intelligence systems, such as expert systems and machine learning. This rule-based programming technique has been applied in such diverse fields as medical diagnostic systems, insurance and banking systems, as well as automated design and configuration systems. Rule-based programming is also helpful in bridging the semantic gap between an application and a program, allowing domain specialists to understand programs and participate more closely in their development. Over sixty programs are presented and all programs are available from an ftp site. Many of these programs are presented in several versions allowing the reader to see how realistic programs are elaborated from ‘back of envelope’ models. Metaprogramming is also presented as a technique for bridging the ‘semantic gap’. Rule-Based Programming will be of interest to programmers, systems analysts and other developers of expert systems as well as to researchers and practitioners in artificial intelligence, computer science professionals and educators.

"This book provides a comprehensive collection of state-of-the-art advancements in rule languages"—Provided by publisher.

The Semantic Web aims at allowing knowledge to be freely accessed and - changed by software. It is now widely recognized that if the Semantic Web is to contain deep knowledge, the need for new representation and reasoning te- niques is critical. These techniques need to 7nd the right trade-o? between - pressiveness, scalability, and robustness to deal with the inherently incomplete, contradictory, and uncertain nature of knowledge on the Web. The annual International Conference on Web Reasoning and Rule Systems (RR) addresses these needs and has grown into a major international forum for the discussion and dissemination of new results concerning Web Reasoning and Rule Systems. The 7rst three International Conferences on Web Reasoning and Rule Systems (see http://www.wr-conference.org), held in Innsbruck, A- tria (2007), Karlsruhe, Germany (2008), and Chantilly, Virginia, USA (2009), received enthusiastic support from the Web Reasoning community. This volume contains the papers presented at the Fourth International C- ference on Web Reasoning and Rule Systems (RR 2010), which was held in Bressanone/Brixen, Italy, September 22-24, 2010, and which continued the - cellence of the RR series. It contains nine full papers, six short papers, four poster/position papers, one PhD paper, and two system descriptions, which were selected out of 31 submissions following a rigorous reviewing process, where each submission was reviewed by at least three program committee members. The volume also contained extended abstracts of the three invited tutorials.

Thinking in terms of facts and rules is perhaps one of the most common ways of approaching problem de7nition and problem solving both in everyday life and under more formal circumstances. The best known set of rules, the Ten Commandments have been accompanying us since the times of Moses; the Decalogue proved to be simple but powerful, concise and universal. It is logically consistent and complete. There are also many other attempts to impose rule-based regulations in almost all areas of life, including professional work, education, medical services, taxes, etc. Some most typical examples may include various codes (e.g. legal or tra?c code), regulations (especially military ones), and many systems of customary or informal rules. The universal nature of rule-based formulation of behavior or inference principles follows from the concept of rules being a simple and intuitive yet powerful concept of very high expressive power. Moreover, rules as such encode in fact functional aspects of behavior and can be used for modeling numerous phenomena.

5th International Symposium, RuleML 2011 - America, Ft. Lauderdale, FL, USA, November 3-5, 2011, Proceedings

Practical Programming with Formal Methods

Third International Workshop, RuleML 2004, Hiroshima, Japan, November 8, 2004, Proceedings

Reasoning in Event-Based Distributed Systems

An Introduction to Rule-based Programming

International Symposium, RuleML 2009, Las Vegas, Nevada, USA, November 5-7, 2009. Proceedings

Adventures in Rule-Based Programming

In this book, the developed methods of natural language processing for Turkish by using rule-based approach were told, and also an implemented infrastructure, Rule-Based Automatic Corpus Generation (RB-CorGen), to use the new developed methods was explained briefly. For testing RB-CorGen on Turkish, the roots, stems and suffixes were obtained by cooperation with Turkish Linguistic Association (Turk Dil Kurumu, TDK) and Dokuz Eylul University, College of Literature Linguistic Department, the defined tags and grammatical rules were stored in XML formatted file, and documents, include nearly 95 million wordforms, were collected from five Turkish newspapers in electronic environment. New methods, called Rule-Based Sentence Boundary Detection (RB-SBD), Rule-Based Morphological Analyser (RB-MA) and Rule-Based POS Tagging (RB-POST), were developed and analysed. It was seen that the success rates of these methods increase with the increasing number of rules.

Mashups are mostly lightweight Web applications that offer new functionalities by combining, aggregating and transforming resources and services available on the Web. Popular examples include a map in their main offer, for instance for real estate, hotel recommendations, or navigation tools. Mashups may contain and mix client-side and server-side activity. Obviously, understanding the incoming resources (services, statistical figures, text, videos, etc.) is a precondition for optimally combining them, so that there is always some undercover semantics being used. By using semantic annotations, neutral mashups permute into the branded type of semantic mashups. Further and deeper semantic processing such as reasoning is the next step. The chapters of this book reflect the diversity of real-life semantic mashups. Two overview chapters take the reader to the environments where mashups are at home and review the regulations (standards, guidelines etc.) mashups are based on and confronted with. Chapters focusing on DBpedia, search engines and the Web of Things inspect the main Web surroundings of mashups. While mashups upgrading search queries may be nearer to the everyday experience of readers, mashups using DBpedia input and sensor data

from the real world lead to important new and therefore less known developments. Finally, the diversity of mashups is tracked through a few application areas: mathematical knowledge, speech, crisis and disaster management, recommendations (for games), inner-city information, and tourism. Participants of the AI Mashup Challenge wrote all the chapters of this book. The authors were writing for their current and future colleagues – researchers and developers all over the Web who integrate mashup functionalities into their thinking and possibly into their applications.

The International Symposium on Rule Interchange and Applications (RuleML 2009), collocated in Las Vegas, Nevada, with the 12th International Business Rules Forum, was the premier place to meet and to exchange ideas from all 7elds of rules technologies. The aims of RuleML 2009 were both to present new and interesting research results and to show successfully deployed rule-based applications. This annual symposium is the 7agship event of the Rule Markup and Modeling Initiative (RuleML). The RuleML Initiative (www.ruleml.org) is a non-pro? umbrella organi- tion of several technical groups organized by representatives from academia, industry and public sectors working on rule technologies and applications. Its aim is to promote the study, research and application of rules in heterogeneous distributed environments such as the Web. RuleML maintains e?ctive links with other major international societies and acts as intermediary between v- ious ‘specialized’ rule vendors, applications, industrial and academic research groups, as well as standardization e?orts from, for example, W3C, OMG, and OASIS. To emphasize the importance of rule standards RuleML 2009 featured, in addition, a tutorial and a workshop dedicated to the newly released W3C Rule Interchange Format (RIF).

RuleML 2003 was the second international workshop on rules and rule markup languages for the Semantic Web, held in conjunction with the International Semantic Web Conference (ISWC). The aim of the RuleML workshop series is to stimulate research on all issues related to web rule languages and to provide an annual forum for presenting and discussing new research results. The Semantic Web is a major world-wide endeavor to advance the Web by enriching its multimedia content with propositional information that can be processed by inference-enabled Web applications. Rules and rule markup languages, such as

RuleML, will play an important role in the success of the Semantic Web. Rules will act as a means to draw inferences, to express constraints, to specify policies for reacting to events, to transform data, etc. Rule markup languages will allow us to enrich Web ontologies by adding definitions of derived concepts, to publish rules on the Web, to exchange rules between different systems and tools, etc. RuleML 2003 built on the success of RuleML 2002, which was held in conjunction with ISWC 2002, Sardinia, Italy. The proceedings of RuleML 2002 can be found at <http://www.eur-ws.org/Vol-60/>. Special highlights of the RuleML 2003 workshop were the two invited presentations given by Peter Chenon "Rules, XML, and the ERM Model" and by Harold Boley on "Object-Oriented RuleML: User-Level Roles, URI-Grounded Clauses, and Order-Sorted Terms". This proceedings volume also contains an invited paper by Francois Bry and Sebastian Schaert on "An Entailment Relation for Reasoning on the Web".

12th International Symposium, PADL 2010, Madrid, Spain, January 18-19, 2010, Proceedings

Web Reasoning and Rule Systems

10th International Conference, RR 2016, Aberdeen, UK, September 9-11, 2016, Proceedings

The MYCIN Experiments of the Stanford Heuristic Programming Project

Playing by the Rules

International Symposium, RuleML 2008, Orlando, FL, USA, October 30-31, 2008, Proceedings

Intelligent Projects Using Python

Jess in Action first introduces rule programming concepts and teaches you the Jess language. Armed with this knowledge, you then progress through a series of fully-developed applications chosen to expose you to practical rule-based development. The book shows you how you can add power and intelligence to your Java software.

With the rapid expansion of the Internet over the last 20 years, event-based distributed systems are playing an increasingly important role in a broad range of application domains, including enterprise management, environmental monitoring, information dissemination, finance, pervasive systems, autonomic computing, collaborative working and learning, and geo-spatial systems. Many different architectures, languages and technologies are being used for implementing event-based distributed systems, and much of the development has been undertaken independently by different communities. However, a common factor is an ever-increasing complexity. Users and developers expect that such systems are able not only to handle large volumes of simple events but also to detect complex patterns of events that may be spatially distributed and may span significant periods of time. Intelligent and logic-based approaches provide sound foundations for addressing many of the research challenges faced and this book covers a broad range of recent advances, contributed by leading experts in the field. It presents a comprehensive view of reasoning in event-based distributed systems, bringing together reviews of the state-of-the-art, new research contributions, and an extensive set of references. It will serve as a valuable resource for students, faculty and researchers as well as industry practitioners responsible for new systems development.

This is a philosophical but non-technical analysis of the very idea of a rule. Although focused somewhat on the role of rules in the legal system, it is also relevant to the place of rules in morality, religion, etiquette, games, language, and family governance. In both explaining the idea of a rule and making the case for taking rules seriously, the book is a departure both in scope and in perspective from anything that now exists.

Second International Workshop, RuleML 2003, Sanibel Island, FL, USA, October 20, 2003, Proceedings

Jess in Action

Rule-based Programming with OPSS

Rule Technologies: Foundations, Tools, and Applications

Handbook of Research on Emerging Rule-Based Languages and Technologies: Open Solutions and Approaches