

1. Record Nr.	UNISA996503566903316
Titolo	CCKS 2022 - evaluation track : 7th China Conference on Knowledge Graph and Semantic Computing Evaluations, CCKS 2022, Qinhuangdao, China, August 24-27, 2022, revised selected papers / / Ningyu Zhang [and four others] editors
Pubbl/distr/stampa	Singapore : , : Springer, , [2022] ©2022
ISBN	981-19-8300-3
Descrizione fisica	1 online resource (249 pages)
Collana	Communications in computer and information science ; ; 1711
Disciplina	006.332
Soggetti	Knowledge representation (Information theory) Semantic computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- A Chemical Domain Knowledge-Aware Framework for Multi-view Molecular Property Prediction -- 1 Introduction -- 2 Related Work -- 2.1 Supervised MRL -- 2.2 Self-supervised MRL -- 2.3 Domain Knowledge Based MRL -- 3 Our Approach -- 3.1 KPGT -- 3.2 Functional Group Embedding -- 3.3 Knowledge Graph Embedding -- 4 Experiments -- 4.1 Dataset -- 4.2 Parameter Settings -- 4.3 Results -- 4.4 Discussion -- 5 Conclusion -- References -- A Coarse Pipeline to Solve Hierarchical Multi-answer Questions with Conditions -- 1 Introduction -- 2 Method -- 2.1 Answer Span Detection -- 2.2 Relation Classification -- 2.3 Additional Strategies -- 3 Experiments -- 3.1 Data Processing -- 3.2 Experiments of Answer Span Detection -- 3.3 Experiments of Relation Classification -- 3.4 Online Result -- 4 Discussion -- 4.1 First Attempt -- 4.2 Second Attempt -- 4.3 Third Attempt -- 4.4 Fourth Attempt -- 4.5 Future Work -- References -- A Pipeline-Based Multimodal Military Event Argument Extraction Framework -- 1 Introduction -- 2 Method -- 2.1 Global Pointer Model for Named Entity Recognition -- 2.2 Yolo Model for Object Detection -- 2.3 Multimodal Matcher -- 3 Experiment -- 3.1 Dataset -- 3.2 Implementation -- 3.3 Main Result -- 4 Conclusion -- References -- A Search-Enhanced Path Mining

and Ranking Method for Cross-lingual Knowledge Base Question Answering -- 1 Introduction -- 2 Task Description -- 3 Method -- 3.1 Question Classification -- 3.2 Principal Entity Extraction -- 3.3 Search-Enhanced Candidate Path Mining -- 3.4 Path Ranking -- 4 Experiment Result -- 4.1 Question Classification -- 4.2 Principal Entity Extraction -- 4.3 Search-Enhanced Candidate Path Mining -- 4.4 Path Ranking -- 4.5 End-To-End Evaluation Result -- 5 Conclusion -- References.

A Translation Model-Based Question Answering Approach over Cross-Lingual Knowledge Graphs -- 1 Introduction -- 2 Approach -- 2.1 Overview -- 2.2 Design of Stages -- 2.3 Our Strategies -- 3 Experiments -- 3.1 Data Set -- 3.2 Implementation -- 3.3 Experiment Results -- 3.4 Competition Results -- 4 Conclusion -- References -- Cascaded Solution for Multi-domain Conditional Question Answering with Multiple-Span Answers -- 1 Background and Task Introduction -- 2 Technical Solution -- 2.1 Data Analysis and Processing -- 2.2 Condition-Answer Extraction -- 2.3 Post-extraction Processing -- 2.4 Condition-Answer Relation Classification -- 2.5 Post-classification Processing -- 3 Experiment -- 3.1 Model Effect Evaluation -- 3.2 End-To-End Effect Evaluation -- 4 Conclusion -- References -- Compound Property Prediction Based on Multiple Different Molecular Features and Ensemble Learning -- 1 Introduction -- 2 Related Work -- 2.1 Molecular Descriptor -- 2.2 SMILES -- 2.3 Molecular Graph Representation -- 3 Method -- 3.1 Molecular Vector Representation -- 3.2 AutoEncoder Model -- 3.3 Ensemble Model -- 4 Experiment -- 4.1 Data Introduction -- 4.2 Experimental Setup -- 4.3 Model Parameters and Result -- 5 Summary -- References -- Diagram Question Answering with Joint Training and Bottom-Up and Top-Down Attention -- 1 Introduction -- 2 Related Work -- 2.1 Visual Question Answering -- 2.2 Textbook Question Answering -- 2.3 Diagram Question Answering -- 3 Approach -- 3.1 Model Framework -- 3.2 Bottom-Up and Top-Down Attention -- 3.3 Joint Training -- 4 Experiment -- 4.1 Datasets -- 4.2 Settings -- 4.3 Results -- 5 Conclusion -- References -- Element Information Enhancement for Diagram Question Answering with Synthetic Data -- 1 Introduction -- 2 Related Work -- 3 Method -- 3.1 Diagram Data Synthesis -- 3.2 Diagram Element Detection.

3.3 Baseline and Diagram Element Embedding -- 4 Experiments -- 4.1 Datasets and Settings -- 4.2 Ablation Studies -- 4.3 Ensemble -- 5 Conclusion -- References -- Financial Event Extraction of NEC Dataset Based on Pointer Network -- 1 Introduction -- 2 Related Work -- 2.1 Pattern Matching Technique -- 2.2 Machine Learning Algorithms -- 3 Approach -- 3.1 Overall Model Structure -- 3.2 Custom Position Id -- 3.3 Adversarial Training -- 3.4 Continue Pre-training -- 3.5 Model Voting -- 4 Experiment -- 4.1 Dataset -- 4.2 Implementation -- 4.3 Main Result -- 4.4 Ablation Study -- 5 Conclusion -- References -- High Quality Article Recognition Based on Ernie and Knowledge Mapping -- 1 Introduction -- 2 Related Work -- 3 Dataset Paper -- 4 Method -- 4.1 Summary -- 4.2 Text Preprocessing -- 4.3 Text Classification Model -- 4.4 Model Fusion and Evaluation -- 4.5 Evaluating Indicator -- 5 Experiment -- 6 Conclusion -- References -- High-Quality Article Classification Based on Named Entities of Knowledge Graph and Multi-head Attention -- 1 Introduction -- 2 Methods -- 2.1 Data Preprocessing -- 2.2 Models -- 2.3 Strategies -- 2.4 Data Augmentation -- 3 Experiment -- 3.1 Dataset -- 3.2 Experimental Setups -- 3.3 Results -- 4 Conclusion -- References -- Implementation and Optimization of Graph Computing Algorithms Based on Graph Database -- 1 Introduction -- 2 Preliminaries -- 2.1 Background -- 2.2 Task Statement -- 3 Methodology -- 3.1 Shortest Path Searching -- 3.2 Hop-Constrained Reachability -- 3.3 Top-k

Personalized PageRank -- 3.4 Closeness Centrality Computation -- 3.5
Triangle Counting -- 4 Conclusion -- References -- Knowledge Graph
Construction for Foreign Military Unmanned Systems -- 1 Introduction
-- 2 Related Work -- 2.1 Knowledge Graph Construction -- 2.2
Knowledge Extraction -- 2.3 Knowledge Graph Completion -- 3
Knowledge Graph Construction.
3.1 Schema Construction -- 3.2 Data Crawling and Knowledge
Extraction -- 3.3 Entity Alignment and Knowledge Graph Completion
-- 3.4 Visualization -- 4 Evaluation -- 5 Conclusion -- References --
Knowledge-Enhanced Classification: A Scheme for Identification
of High-Quality Articles -- 1 Introduction -- 1.1 Task Definition -- 1.2
Main Challenges and Solutions -- 2 Our Method -- 2.1 Overview
of Basic Model Structure -- 2.2 Model Backbone -- 2.3 Input
with Diversity -- 2.4 Change Model Structure -- 3 Innovation Strategies
-- 3.1 Adversarial Training -- 3.2 K-Fold Cross-Fusion -- 3.3
Continued Pre-training -- 3.4 EMA -- 3.5 Focal Loss -- 4 Experiments
-- 4.1 Dataset -- 4.2 Implementation -- 4.3 Result -- References --
Learning Seq2Seq Model with Dynamic Schema Linking for NL2SQL -- 1
Introduction -- 2 Related Work -- 2.1 NL2SQL Task Classification
and Common Datasets -- 2.2 The Development of NL2SQL -- 3
Approach -- 3.1 Map the Column in SQL to the Form of "Table.
Column" -- 3.2 Dynamic Schema Linking -- 3.3 Seq2Seq Pre-trained
Model -- 4 Evaluation -- 4.1 Dataset -- 4.2 Evaluation Metric -- 4.3
Experimental Setup -- 4.4 Postprocess -- 5 Conclusion -- References
-- Learning to Answer Complex Visual Questions from Multi-View
Analysis -- 1 Introduction -- 2 Main Methods -- 2.1 Multi-View
Training -- 2.2 Step Training -- 3 Experiments -- 3.1 Evaluation
Metrics -- 3.2 Implementation Details -- 3.3 Comparison with State-
of-the-Art Methods -- 3.4 Experimental Result -- 3.5 Ablation Study
-- 3.6 Online Result -- 4 Conclusions -- References -- A Prompt-
Based UIE Framework -- 1 Introduction -- 2 Related Work -- 3 Task
Description -- 4 Methods -- 4.1 Three Sub-modules of Our Framework
-- 4.2 Our Models -- 5 Experiments -- 5.1 Experiment for Seen
Schemas -- 5.2 Experiment for Unseen Schemas -- 6 Conclusion --
References.
Multi-modal Representation Learning with Self-adaptive Threshold for
Commodity Verification -- 1 Introduction -- 2 Method -- 2.1 Self-
adaptive Threshold -- 2.2 Model Architecture -- 2.3 Loss Function -- 3
Experiments -- 3.1 Experimental Setup -- 3.2 Ablation -- 3.3 Score
Distribution -- 4 Conclusion -- References -- Multimodal
Representation Learning-Based Product Matching -- 1 Introduction --
2 Related Works -- 2.1 Product Matching -- 2.2 Multimodal
Representation Learning -- 3 Methodology -- 3.1 Text Representation
Module -- 3.2 Image Representation Module -- 3.3 Contrastive
Learning Objective -- 3.4 Model Ensemble -- 4 Experiments -- 4.1
Dataset -- 4.2 Data Pre-processing -- 4.3 Experimental Setup -- 4.4
Post-processing -- 4.5 Experimental Results -- 5 Conclusion --
References -- Relation Extraction as Text Matching: A Scheme for
Multi-hop Knowledge Base Question Answering -- 1 Introduction -- 2
Methodology -- 2.1 Question Classification -- 2.2 Entity Linking -- 2.3
Path Construction -- 2.4 Answer Retrieval -- 3 Experiment -- 3.1
Dataset -- 3.2 Experiment Details -- 4 Conclusion -- References --
Research on Salient Reasoning for Commonsense Knowledge -- 1
Related Work -- 2 Data -- 2.1 Data Sources -- 2.2 Significant
Definitions -- 2.3 Data Annotation Analysis -- 3 Method -- 3.1 CSI-
Prompt -- 3.2 MultiTask-Ernie -- 4 Experiments -- 4.1 Data
Distribution -- 4.2 Main Model -- 4.3 Main Method -- 4.4
Experimental Results -- 5 Conclusion -- References -- Retrieval-Then-

Parsing: A Two-Stage Model for SQL Generation in Financial Domain --
1 Introduction -- 2 Methodology -- 2.1 Overview -- 2.2 Table
Retriever -- 2.3 Knowledge-Enhanced Semantic Parser -- 3 Experiment
-- 3.1 Dataset -- 3.2 Table Retrieval -- 3.3 Semantic Parsing -- 4
Conclusion -- References -- Structured Design Solves Multiple Tables
of NL2SQL -- 1 First Section -- 1.1 Background.
1.2 Data Description.
