

Monika Jain

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RESEARCH INTERESTS

Semantic Web, Information extraction, Knowledge Graphs, Machine Learning, Natural Language Processing, and Deep learning

WORK EXPERIENCE

Indraprastha Institute of Information Technology (IIIT-D), Delhi Research Scholar	Delhi, India January 2019-Present
Child Health Imprints Research Intern	Delhi, India June 2019-July 2019
Manipal University Jaipur Assistant Professor (IT)	Jaipur, Rajasthan, India July 2015-December 2018
Raja Ramanna Centre for Advanced Technology, Indore Department of Atomic Energy, Government of India Research Intern	Indore, India July 2014-May 2015

EDUCATION

Indraprastha Institute of Information Technology (IIIT-D) Pursuing PhD in Computer Science and Engineering	Delhi, India January 2019-Present
Banasthali Vidyapeeth Master of Technology (M.Tech) in Computer Science	Niwai, Rajasthan, India July 2015
Lakshmi Narain College of Technology Bachelor of Engineering (B.E) in Computer Science	Indore, Madhya Pradesh, India June 2012

PROJECT

1. Document Relation Extraction from Text

Document-level relation extraction is a challenging task that involves identifying relationships between entities within a document. In this work, we propose a context-aware link prediction approach for improving document-level relation extraction.

2. Relation Extraction from Biomedical Text

Relation Extraction (RE) is the task of extracting semantic relationships between entities in a sentence and aligning them to relations defined in a vocabulary, which is generally in the form of a Knowledge Graph (KG) or an ontology. We present a novel technique called ReOnto, that makes use of neuro-symbolic knowledge for the relation extraction task.

3. Nutrition Compliant System: Ontology modeling and deployment of hospital policies and nutritional guidelines

Babies born before 34 to 37 weeks (admitted to NICU) often have problems feeding from a bottle or a breast. We have developed an ontology based nutrition guideline system which captures all the current information of neonates like day of life, sign and symptom and others in integration with rules built with the help of medical experts and guidelines available. This system provides feed recommendation to babies.

PUBLICATIONS

- **Monika Jain** “Knowledge Enabled Relation Extraction”. PhD Symposium Track, WWW '24
- **Monika Jain**, Raghava Mutharaju, Ramakanth Kavaluru, Kuldeep Singh “Revisiting Document-Level Relation Extraction with Context-Guided Link Prediction”, Main Technical Track, AAAI 2024
- Ravneet. Kaur, **Monika Jain** et al., "An Ontology and Rule-Based Clinical Decision Support System for Personalized Nutrition Recommendations in the Neonatal Intensive Care Unit", Journal, IEEE Access 2023
- **Monika Jain**, Kuldeep Singh and Raghava Mutharaju “ReOnto: A Neuro-Symbolic Approach for Biomedical Relation Extraction”, Research Track, ECML PKDD 2023
- Nikhil Sachdeva, **Monika Jain**, and Raghava Mutharaju, “Extraction of Union and Intersection Axioms from Biomedical Text”, Poster track, ESWC conference, June 2021
- **Monika Jain**, Paramita Mirza and Raghava Mutharaju “Cardinality Extraction from Text for Ontology Learning”, ACM IKDD CODS and 25th COMAD, Young Researchers' Symposium track, 2020

ACTIVITIES

- TheWebConf 2024
- Member-CIKM 2023
- Subreviewer-ESWC2023
- PC Member-TheWebConf2023-Companion
- PC Member-SemREC 2022
- Subreviewer-CODS-COMAD 2022
- PC Member-CIKM 2022

PROGRAMMING LANGUAGES/Frameworks

OWL, RDF, SPARQL, Python
