

# Monika Jain

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<https://scholar.google.co.in/citations?user=IRf7z-oAAAAJ&hl=en>

Girls Hostel, IIIT Delhi, New Delhi

## RESEARCH INTERESTS

Ontology Learning, Semantic Web, Knowledge Graphs, Machine Learning, Big Data

## WORK EXPERIENCE

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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*

## EDUCATION

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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

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### 1: Cardinality Extraction from Text for Ontology Learning

Cardinalities play an important role in several domains and it is generally hard to extract relations involving cardinalities from text. We will focus on extracting three types of cardinality relations, at least (minimum), at most (maximum) and exact.

**Status:** Ongoing

In collaboration with **Max Planck Institute for Informatics, Saarbrücken, Germany**

Tools and Technology: Python programming, Natural Language Processing

### 2: Construction of knowledge graph automatically from the text

Based on a defined ontology model (comprising of classes and relationships), we will extract instances and their relationships with other classes from the text, to build a knowledge graph out of it.

For this project, we will focus in the domain of medicines: their side-effects, what they cure, quantities and other general attributes.

**Status:** Ongoing

## PUBLICATIONS

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- **Monika Jain**, Paramita Mirza and Raghava Mutharaju "Cardinality Extraction from Text for Ontology Learning" Accepted in ACM India Joint International Conference on Data Science & Management of Data 7th ACM IKDD CODS and 25th COMAD, Young Researchers' Symposium track, January 2020
- **Jain** "Building a Smart and Energy Efficient World: An Era of Internet of Things" in book "**Stances of E-Government: Policies, processes and Technology**", published by CRC Press, Taylor and Francis Group vide catalog no. K35745.
- **Monika Jain**, Rahul Saxena "Parallelization of Video Summarization over Multi-Core Processors" **International Journal of Pure and Applied Mathematics** Volume 118 No. 9 2018, 571-584 ISSN: 1311-8080 (printed version)
- **Jain M.**, Saxena R., Agarwal V., Srivastava A. (2018) An OpenMP-Based Algorithmic Optimization for Congestion Control of Network Traffic. In: Satapathy S., Tavares J., Bhateja V., Mohanty J. (eds) **Information and Decision Sciences**. Advances in Intelligent Systems and Computing, vol 701. Springer, Singapore [https://link.springer.com/chapter/10.1007/978-981-10-7563-6\\_6](https://link.springer.com/chapter/10.1007/978-981-10-7563-6_6)
- Rahul Saxena, **Monika Jain**, D.P. Sharma, Ankit Mundra "A review of load flow and network reconfiguration techniques with their enhancement for radial distribution network" **Doi: 10.1109/pdgc.2016.7913188**, **4<sup>th</sup> IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC 2016)**. <http://ieeexplore.ieee.org/abstract/document/7913188/>

## ACTIVITIES

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- **Joint organizing secretary of** Int. Conference on Intelligent Communication and Computational Techniques (ICCT 2017 and ICCT-2019, <http://icct.co.in>)
- **Guest Editor** for Special Issue Recent Trends in Communication and Computational Intelligence in International Journal of Computers and Application (IJCA), Taylor and Francis.
- **Technical Program Committee** member of INDIACOM-2018, SSIC-17.
- **Technical advisory member** of International Conference on Applied Sciences, Engineering, Technology and Management (**ICASETM-18**) and International Conference on Recent Advancement In Computer Science and Communication Technology (**ICRCST-18**).

## PROGRAMMING LANGUAGES/Frameworks

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Apache Spark/Hadoop, OWL, RDF, SPARQL, Java, Python