#### Resume

Name: Raksha Sharma

Email: rakshasharma.fcs@iitr.ac.in, raksha@cse.iitb.ac.in, lastengg@gmail.com

Phone: 91-1332-28**5661** (Office)

Web Page: https://www.iitr.ac.in/departments/CSE/pages/People+Faculty+Raksha\_Sharma.html

## **Education Qualification**

- Ph.D. from Indian Institute of Technology Bombay in the area of Natural Language Processing (NLP) with 8.14 CGPA, under the guidance of Prof. Pushpak Bhattacharyya (from January 2012 till July 2017).

- M.Tech. from Indian Institute of Information Technology and Management, Gwalior in 2009 with 7.9 CGPA.
- B.Tech. from Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal in 2006 with 78.3%.

## **Experience**

**Assistant Professor** in Computer Science Department of Indian Institute of Technology, Roorkee, India, from January 2019 till present.

Research Projects: Hate Speech Detection, An Automated Conversation System based on Visuals, Summarization in News Domain

Teaching Assignment: Logics and Reasoning, Artificial Intelligence

Research scientist at Tata Research Design and Development Center (TRDDC), Pune from October 2017 till December 2018.

Project: Information extraction in the biomedical domain.

Intern at Xerox Research Center of India (XRCI) from June 2015 till December 2015 (7 Months).

Project: Cross-Domain Sentiment Analysis

**Adjunct faculty** for Machine Learning at Aegis School of Business, Data Science, Cyber Security & Telecommunication Mumbai in 2017.

**Adjunct faculty** for Natural Language Processing at Aegis School of Business, Data Science, Cyber Security & Telecommunication Pune in 2018.

**Teaching Assistant** at IIT Bombay from 2012 till 2014.

**Lecturer** in Jaypee University of Engineering and Technology Guna from July 2009 till December 2012.

#### **Publications:**

- 1. **R Sharma**, P Bhattacharyya. Detecting Domain Dedicated Polar Words. In Proceedings of International Joint Conference on Natural Language Processing (IJCNLP) 2013. Nagoya, Japan.
- 2. **R Sharma**, P Bhattacharyya. A Sentiment Analyzer for Hindi Using Hindi Senti Lexicon. In Proceedings of International Conference on Natural Language Processing (**ICON**) 2014. Goa, India.
- 3. **R Sharma**, M Gupta, A Agarwal, P Bhattacharyya. Adjective Intensity and Sentiment Analysis. In Proceedings of Empirical Methods in Natural Language Processing (EMNLP) 2015. Lisbon, Portugal
- 4. R Sharma, P Bhattacharyya. Domain Sentiment Matters: A Two Stage Sentiment Analyzer. In

- Proceedings of International Conference on Natural Language Processing (ICON) 2015. Trivandrum, India.
- 5. **R Sharma**, P Bhattacharyya. High, Medium or Low? Detecting Intensity Variation Among polar synonyms in WordNet. In Proceedings of Global WordNet Conference **(GWC) 2016**. Bucharest, Romania.
- 6. **R Sharma**, Sudha Bhingardive, P Bhattacharyya. Meaning Matters: Senses of Words are More Informative than Words for Cross-domain Sentiment Analysis. In Proceedings of International Conference on Natural Language Processing (**ICON**) 2016. Varanasi, India.
- 7. **R Sharma**, A somani, L Kumar, P Bhattacharyya, Sentiment Intensity Ranking among Adjectives Using Sentiment Bearing Word Embeddings. In Proceedings of Empirical Methods in Natural Language Processing (EMNLP) 2017. Copenhagen, Denmark.
- 8. **R Sharma**, D Mondal, P Bhattacharyya. A comparison among Significance Tests and Other Feature Building Methods for Sentiment Analysis: A First Study. Published in Springer LNCS Journal 2017, also presented in International Conference on Intelligent Text Processing and Computational Linguistics (CICLing) 2017. Budapest, Hungary.
- 9. **R Sharma**, P Bhattacharyya, S Dandapat, H Bhatt, Identifying Transferable Information Across Domains Using  $\chi 2$  test and Cosine-similarity for Cross-domain Sentiment Classification. 56th Annual Meeting of the Association for Computational Linguistics (ACL) 2018. Melbourne, Australia.
- 10. **R Sharma**, G K Palshikar, S Pawar, An Unsupervised Approach for Cause Effect Relation Extraction from Biomedical Text. 23rd International Conference on Natural Language & Information Systems (NLDB) 2018, Paris, France.
- 11. S Sangawan, **R Sharma**, G K Palshikar, Cold is a Disease and D-cold is a Drug: Identifying Biological Types of Entities in the Biomedical Domain. International Conference on Intelligent Text Processing and Computational Linguistics (**CICLing**) 2019. La Rochelle France.
- 12. S Pawar, R Sharma, GK Palshikar, P Bhattacharyya, Cause–Effect Relation Extraction from Documents in Metallurgy and Materials Science in Transactions of the Indian Institute of Metals 2019.
- 13. **R Sharma**, P Bhattacharyya, Welcome vs. Heartily Welcome : Emotion Term Frequency Intensifies Polarity Orientation. (Under Evaluation)

# **Patent**

METHOD AND SYSTEM FOR TRAINING A TARGET DOMAIN CLASSIFIER TO LABEL TEXT SEGMENTS (Link: http://www.freepatentsonline.com/y2018/0068231.html) Inventors: **Raksha Sharma**, Sandipan Dandapat, Himanshu Sharad Bhatt (Filed by Xerox Research Center of India)

Link for all the published papers: https://scholar.google.co.in/citations?user=V9oafzsAAAAJ&hl=en

## **Academic Achievements**

- Offer of Appointment for the post of Scientist C from Indian Space Research Organization in 2009
- AIR 298 in GATE (Graduate Aptitude Test in Engineering) IT, 2007.
- Certificate of Merit for securing **4th position** in Btech. at college level.
- PhD work selected in IRISS 2016: 10th Inter-Research-Institute Student Seminar in Computer Science.
- Received Microsoft Research Travel Grant to visit EMNLP 2017.
- Received Google Research Travel Grant to visit ACL2018.
- Program Committee Member and Reviewer for North Amarican Association for Computational Linguistics 2019.

- Reviewer for International Conference on Natural Language Processing 2016, 2017, 2019.
- Program Committee Member for ECNLP2019: Workshop on e-Commerce and NLP.

# **Invited Talks (Oral/Poster)**

- Invited talk at **ACM IKDD CoDS 2016**, held in Pune from 13th March to 16th March.
- The work titled as "Adjective Intensity and Sentiment Analysis" is selected for an Oral discussion at IRISS 2017: 11<sup>th</sup> Inter-Research-Institute Student Seminar in Computer Science co-located with ACM India Annual Event.
- "Sentiment Bearing Word Embeddings for Sentiment Analysis" in **AIAI 2017**: Amazon India Artificial Intelligence Summit, held in Bangalore, India on 18th September 2017.
- A talk on the PhD work in **Google NLP Summit**, 25 27 September 2017 in Zurich, Switzerland.
- A talk on "Exploiting Word Properties for Sentiment Analysis" in **IIT Delhi** on 26<sup>th</sup> Feb 2018
- Faculty Development Program on Machine Learning and Data Analytics using Python. ( <a href="https://eict.iitr.ac.in/mldaiitr.html">https://eict.iitr.ac.in/mldaiitr.html</a>) by **EICT IITR** from 9th September till 13th September 2019.
- Faculty Development Program on Machine Learning and Network Security by IIT Roorkee from 14th to 18th January 2020.

# **Conducted Tutorial and Workshop**

Speaker in **one week short course on Machine Learning** by EICT Academy IIT Roorkee, from 9-13 September 2019.

**A half day Workshop** on "Sentiment Analysis" at VIVA Institute of Engineering and Technology, Mumbai, from 20-24, June 2016.

**A half day Tutorial** on "Statistical Significance Tests and Its Impacts in Sentiment Analysis" in **ICON-2016** Conference, 17-20, Dec 2016, IIT(BHU), Varanasi, India.

**A half day Tutorial** on "Biomedical Text and Natural Language Processing" in **ICON-2018** Conference, 15-18, Dec 2018.

Quality Improvement Program on Machine Learning for NLP and IoT from 12th to 18th July 2020. (To be held at IIT Roorkee)

## **Technical Skills**

**Programming Languages:** C, C++, java, python, bash.

Operating Systems: Linux, Ubuntu, Windows.

Machine Learning Tool: WEKA, Scikit Learn, Java-ML.

Tools: Octave, R.

Writing Tool: Latex, MS Word.