Jyotsana Khatri

PhD Scholar, IIT Bombay
CFILT Lab

jyotsanak@cse.iitb.ac.in
https://www.cse.iitb.ac.in/~jyotsanak

Research Interests	Machine Learning, Natural Language Processing (NLP), Cross-lingual Word Embeddings, Machine Translation
	Research Focus: Deep learning techniques to solve various NLP tasks for low resource scenarios

Education

Indian Institute of Technology Bombay, India	July 2017 - Present
Ph.D., Computer Science and Engineering	
Advisor: Prof. Pushpak Bhattacharyya	
Research focus is on improving machine translation for low resource scenarios.	
Dhirubhai Ambani Institute of Information and Communication Technology	July 2014 - June 2016
M.Tech., Information and Communication Technology	
Thesis Title: Verbose Query Processing in Biomedical Information Retrieval	
Advisor: Prof. Prasenjit Majumder	
CPI: 8.69 (10)	
Banasthali University	July 2009 - June 2013
B.Tech., Information Technology	
Percentage: 79.33%	

Experience

Indian Institute of Technology Bombay	July 2018 - Present
Teaching Assistant (With Ph.D.)	
Worked as TA for courses Software Lab, Web Mining.	
Natural Language Processing and Data Structure	
Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar	July 2014 - June 2016
Teaching Assistant (With M.Tech.)	
Worked as TA for courses Database Management System, and Operating System	
MAQ Software, Mumbai	July 2016 - June 2017
Software Engineer	
Worked on PowerBI Custom Visuals, Azure Data Factory, SQL Server Analysis Services	
Indian Agricultural Statistics and Research Institute, Delhi	July 2012 - Dec 2012
Intern, Web Development	

Worked on creating a website using ASP.NET and
SQL Server

Publications

- Jyotsana Khatri, Pushpak Bhattacharyya "**Filtering Back-Translated Data in Unsupervised Neural Machine Translation.**" In Proceedings of the 28th International Conference on **Computational Linguistics**, pp. 4334-4339. 2020.

- Jyotsana Khatri, Rudra Murthi, Pushpak Bhattahcaryya, "**A Study of Efficacy of Cross-lingual Word Embeddings for Indian Languages**", Proceedings of the ACM India Joint International Conference on Data Science and Management of Data (Young Researchers' Symposium) (**CODS-COMAD**), 2020.

- Jyotsana Khatri, Pushpak Bhattacharyya, "**Utilizing Monolingual Data in NMT for Similar Languages: Submission to Similar Language Translation Task**", Proceedings of the Fourth Conference on Machine Translation (Shared Task Papers) (**WMT**), 2019.

- Nikhil Saini, Jyotsana Khatri, Preethi Jyothi, Pushpak Bhattacharyya. "**Generating Fluent Translations from Disfluent Text Without Access to Fluent References: IIT Bombay@ IWSLT2020.**" In Proceedings of the 17th **International Conference on Spoken Language Translation**, pp. 178-186. 2020.

Tutorials

- "**Unsupervised Neural Machine Translation**" Rudra Murthy, Tamali Banarjee, Jyotsana Khatri, sDiptesh Kanojia, and Pushpak Bhattacharyya, **17th International Conference on Natural Language Processing (ICON)**, December, 2020.

Projects

Verbose Query Processing in Biomedical Information Retrieval   July 2015 - June 2016

Explored performance of existing retrieval models in case of biomedical data. We showed that selective query expansion based on pre-retrieval predictors help in retrieval.

Integration of Web Based Systems   July 2012 - Dec 2012

Designed a website for management of projects under IASRI

Online Quiz Application   April 2012 - July 2012

Designed a website for quiz application using ASP.NET (C#) and SQL Server

Academic Activities

- Organizing Committee Member for 7th meeting of Forum for Information Retrieval 2015 (FIRE – 2015) at DAIICT, Gandhinagar
- Certificate in French (Basic Knowledge)
- Relevant course work: Machine Learning, Digital Image Processing, Web Mining, Pattern Recognition, Information Retrieval

Technical Skills	- HTML5, CSS3, JavaScript
	- Python, Java, C, C++
	- Pytorch
	- LaTeX