

Iknoor Singh

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Education

The University of Sheffield, Sheffield, UK

Sept 2020 - Present

Ph.D. in Computer Science

Research Advisor: Kalina Bontcheva and Carolina Scarton

Panjab University, Chandigarh, India

Sept 2016 - June 2020

Bachelor of Engineering with Honours, Information Technology

CGPA: 8.65/10.0

Research Experience

Visiting Researcher - NLP Group, The University of Sheffield, UK

Jan - July 2020

Advised by Kalina Bontcheva and Carolina Scarton

Worked on scraping and development of COVID-19 disinformation corpus which was used for exploratory analysis and to train a classification aware neural topic model. Also, developed a tool for automated quote source pair extraction from text. This project was funded by the European Commission H2020 WeVerify.

Project Intern - IBM Research Lab, India

June- Sept 2019

Advised by Sumit Bhatia

As a part of IBM Global Remote Mentoring program, a political ideology detection corpus was developed to compare the sentiment scores of news articles belonging to different biases and the results were further plotted and analysed visually.

Research Intern - Queen's University Belfast, UK

Jan - May 2019

Advised by Deepak Padmanabhan

Implemented three computational formulations of textual coherence drawing upon the state-of-the-art methods in natural language processing, to analyze the textual coherence of fake news articles vis-a-vis legitimate ones.

Research Intern - Design Innovation Centre Lab, Panjab University

June- Dec 2018

Advised by Naveen Aggarwal

Implemented a complete text preprocessing pipeline for the clustering of Punjabi text documents. Also, developed a text similarity and plagiarism detection system for the low-resourced Punjabi language. This project was funded by MHRD (Indian Ministry of Human Resource Development).

Publications

Iknoor Singh, Carolina Scarton and Kalina Bontcheva. "Multistage BiCross Encoder: Team GATE Entry for MLIA Multilingual Semantic Search Task 2.", *arXiv preprint arXiv:2101.03013* (2021).

Xingyi Song, Johann Petrak, Ye Jiang, **Iknoor Singh**, Diana Maynard, Kalina Bontcheva "Classification Aware Neural Topic Model and its Application on a New COVID-19 Disinformation Corpus", *arXiv preprint arXiv:2006.03354* (2020).

Kokil Jaidka, **Iknoor Singh**, Jiahui Liu, Niyati Chhaya and Lyle Ungar "A report of the CL-Aff OffMy-Chest Shared Task: Modeling Supportiveness and Disclosure", in *Proceedings of the 3rd Workshop on Affective*

Iknoor Singh, Deepak P and Anoop K, "On the Coherence of Fake News Articles", *Proceeding of ECML/PKDD 2020 News Recommendation and Analysis Workshop*. 2020

Iknoor Singh, Vijay Paul Singh and Naveen Aggarwal, "Comparative Study on Punjabi Document Clustering", in *International Conference on Communication and Intelligent Systems (ICCIS 2019)*, India, 2019.

Pranav Shankar, Rajat Kaushal and **Iknoor Singh**, "Analyzing Varied Approaches for Forecast of Stock Prices by Combining News Mining and Time Series Analysis", in *IEEE International Conference on Computing, Power and Communication Technologies (GUCON 2019)*, India, 2019.

Akanksha Chuchra, **Iknoor Singh**, Vijay Paul Singh and Naveen Aggarwal, "Similarity Analysis & Plagiarism Detection for Punjabi Documents using NLP", in *Proceedings of the 11th Annual ACM India Compute Conference*, Chandigarh, India, 2018. (Poster)

Projects

Automatic Evaluation

- Got **1st prize** in an international level hackathon conducted by IIT BHU.

Used natural language processing to build an app for automated assessment of subjective answers by checking the semantic similarity of the solution given by the user with that of the original correct answer in the database and compute marks.

Crime Mapping and Prediction

- Got **3rd prize** from over 130 teams in a national level hackathon conducted by Nagarro.

Implemented an algorithm that takes safety as the constraint to compute the safest optimum path from one place to another. Also, deployed a supervised machine learning model for crime prediction at a particular place and at a particular time

Search Through Video

- Got **1st prize** in a hackathon conducted by Panjab University, Chandigarh.

Developed an app to search through the video to find the exact time at which the sub-topic is being taught or discussed in a video. This prevents manual searching through long videos.

Achievements and Awards

- ❑ **Scholarship** for working on a research project at my institute, as a part of research collaboration between Panjab University and King Abdulaziz University, Saudi Arabia.
- ❑ **Shared Task Organizer** of Interactional Affect (The OffMyChest Shared Task) at the third Affective Content Analysis workshop@AAAI 2020 together with Adobe and the UPenn.
- ❑ Got selected as **Microsoft Student Partner** for the academic year 2017-18.
- ❑ Team lead at **AIESEC**, the world's largest youth-run organization associated with the UN.
- ❑ Got **24th** rank in India in Code-n-counter competitive programming conducted by HackerEarth.
- ❑ Active member of **SOREM** society (NGO), a Society for Rehabilitation of Mentally Challenged where I have been involved in various social events including teaching and helping the disabled children.
- ❑ Represented my school at **International CBSE Summit** 2014.