

Iknoor Singh

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Professional Experience

Natural Language Processing Group, University of Sheffield, UK Mar 2022 - Present
Research Associate (part-time), with GateNLP team to work on WeVerify, a European Union-funded project for collaborative, decentralised content verification, tracking, and debunking.

Amazon, London, UK Sept 2022 - Dec 2022
Applied Scientist Intern, with Amazon Alexa team on topical utterance generation.

Natural Language Processing Group, University of Sheffield, UK Jan - July 2020
Visiting Researcher, with Carolina Scarton and Kalina Bontcheva
Trained a COVID-19 disinformation classifier and analysed the spread of different categories with respect to time, modality and origin source. Also, developed automated source extraction for quoted text in news articles.

IBM Research Lab, India June- Sept 2019
Summer Intern, with Sumit Bhatia
A political ideology detection corpus was developed to visually compare the sentiment scores of news articles with different biases and partisanship. This project was done as a part of IBM Global Remote Mentoring.

Queen's University Belfast, Northern Ireland Jan - May 2019
Research Intern, with Deepak Padmanabhan
Implemented different computational formulations of textual coherence using state-of-the-art methods in natural language processing, to analyse the coherence of fake news articles vis-a-vis legitimate ones.

DIC Centre, Indian Ministry of Human Resource Development June- Dec 2018
Research Intern, with Naveen Aggarwal
Implemented text preprocessing pipeline for low-resourced Gurmukhi language script and utilised it for clustering and plagiarism detection. The tool is used by universities which have Punjabi as their mainstream language in academia.

Education

Doctor of Philosophy, PhD - Computer Science Sept 2020 - Present
Natural Language Processing Group, University of Sheffield, UK
Supervisors: Carolina Scarton and Kalina Bontcheva
Award: Fully-funded Doctoral Scholarship

Bachelor of Engineering with Honours - Information Technology Sept 2016 - June 2020
Panjab University, Chandigarh, India
Award: Undergraduate Research Scholarship (4th year)

Research Interest

I am interested in the area of **Natural Language Processing** and **Deep Learning**. My work is currently centred on the application area of **cross-lingual information retrieval**, such as **automated fact-checking**, primarily focussing on claim matching and detecting the spread of multilingual debunked narratives. My long-term ambition lies in improving low-resource and data-scarce NLP, a practical setting useful for both research and industry.

Publications

Please check my [Google Scholar](#) for an up-to-date list.

Iknoor Singh, Yue Li, Melissa Thong, and Carolina Scarton. 2022. GateNLP-UShef at SemEval-2022 Task 8: Entity-Enriched Siamese Transformer for Multilingual News Article Similarity. In Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022), pages 1121–1128, Seattle, United States. Association for Computational Linguistics (ACL 2022)

Iknoor Singh, Carolina Scarton, and Kalina Bontcheva. "Multistage BiCross encoder for multilingual access to COVID-19 health information", Public Library of Science (PLOS ONE) *Journal* 16(9): e0256874 (2021).

Kokil Jaidka, Andrea Ceolin, **Iknoor Singh**, Niyati Chhaya, and Lyle Ungar. "WikiTalkEdit: A Dataset for modelling Editors' behaviours on Wikipedia." In *Proceedings of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT 2021)*.

Xingyi Song, Johann Petrak, Ye Jiang, **Iknoor Singh**, Diana Maynard, and Kalina Bontcheva "Classification Aware Neural Topic Model and its Application on a New COVID-19 Disinformation Corpus", *PLOS ONE Journal* 16(2): e0247086 (2021).

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 Content Analysis @ AAAI (AffCon2020)*

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)*.

Personal Projects

Automatic Evaluation

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

Crime Mapping and Prediction

- Got **3rd prize** from over 130 teams in an Indian 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 area and time

Search Through Video

- Got **1st prize** in a hackathon conducted by Panjab University, Chandigarh.
Developed an app using Python to search through the video to find the exact time the sub-topic is being taught or discussed in a video. This prevents manual searching through long videos.

Responsibilities and Awards

- ❑ Tutored **100+** students as a **Teaching Assistant** for Text Processing modules COM4115 and COM6115 at the Department of Computer Science, University of Sheffield, UK (Fall 2021 semester).
- ❑ Got selected for an **Undergraduate Scholarship** for working on a research project as a part of a research collaboration between Panjab University, India and King Abdulaziz University, Saudi Arabia.
- ❑ **One among 120** students in **India** who got selected for the **Microsoft Student Partner** program.
- ❑ Team lead at **AIESEC**, the world's largest youth-run organisation associated with the **United Nations**.
- ❑ Got **24th** rank in India in Code-n-counter competitive programming conducted by HackerEarth.
- ❑ **Shared Task Organizer** of Interactional Affect (The OffMyChest Shared Task) at the third Affective Content Analysis workshop@AAAI 2020 together with Adobe and the University of Pennsylvania.
- ❑ One among four students who represented my school at **International CBSE Summit** 2014.
- ❑ 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 disabled children.