Iknoor Singh

in linkedin.com/in/iknoorsingh

iknoorjobs.github.io

Experience

Natural Language Processing (NLP) Group, University of Sheffield, UK

Mar 2022 - Present

Research Associate with GateNLP team

Sheffield, UK

 Contributed to multiple projects within a European Union-funded research initiative, developing a Chrome plugin, maintaining GATE cloud services, and participating in various other ML/DL research projects focused on misinformation detection. Delivered advanced tools and techniques for the benefit of fact-checkers.

Amazon, London, UK

Sept 2022 - Dec 2022

Applied Scientist Intern (L5) with Alexa Knowledge SLU Team

London, UK

- Developed novel methods for generating and evaluating topical utterances, involving fine-tuning of large language models (LLMs) and utilizing Generative AI on Amazon AWS.
- Contributed to the enhancement of team capabilities in natural language understanding and generation.

University of Sheffield, UK

Jan 2020 - July 2020

Intern with Carolina Scarton and Kalina Bontcheva

Sheffield, UK

 Led the development of an end-to-end data science pipeline, encompassing problem definition, data scraping, exploratory data analysis (EDA), modelling, insights, and visualizations. This contributed to the successful development of a COVID-19 disinformation classifier, providing critical insights during the global crisis.

IBM Research Lab, India

June 2019 - Sept 2019

Intern with Sumit Bhatia

Delhi, India

- Pioneered the creation of a political ideology detection corpus using data scraping.
- · Did exploratory data analysis to visually compare the sentiment scores of news articles with different biases and partisanship. This project was undertaken as part of IBM Global Remote Mentoring.

Queen's University Belfast, Northern Ireland, UK

Jan 2019 - May 2019

Intern with Deepak Padmanabhan

Belfast, UK

- Implemented cutting-edge computational formulations of textual coherence using deep learning methods.
- · Analyzed the coherence of fake news articles, contributing to the understanding of disinformation dynamics.

Ministry of Human Resource Development (MHRD), India

June 2018 - Dec 2018

Intern with Naveen Aggarwal

Chandigarh, India

- Implemented an end-to-end text preprocessing pipeline for the low-resourced Punjabi language.
- Applied machine learning for clustering and plagiarism detection, directly benefiting Punjabi-speaking universities.

Education

Doctor of Philosophy, PhD - Computer Science

Sept 2020 - April 2024

University of Sheffield, UK

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

Chandigarh, India

Award: Undergraduate Research Scholarship (4th year)

Technical Skills

Languages: Python, C/C++, JavaScript, Groovy

ML/DL/Al Libraries: Scikit-learn, Transformers, TensorFlow, Keras, PyTorch, CUDA Data Analysis: Pandas, Matplotlib, Seaborn, NumPy, BeautifulSoap, ElastiSearch Web Development: HTML, CSS, JavaScript, Bootstrap, ReactJS, Gradio, Flask Operating Systems and Others: Unix/Linux, AWS, Sagemaker, S3, EC2, MinIO, Git

Personal Projects

Automated Subjective Answer Assessment App | Python, Semantic Similarity

- Developed an innovative app for automated subjective answer assessment, leveraging semantic similarity for accurate marking against a comprehensive answer database.
- Secured 1st prize in an international-level hackathon conducted by IIT BHU.

Crime Mapping and Prediction | Supervised Machine Learning, Algorithm Optimization

- Devised a safety-constrained algorithm for calculating the safest optimal path and implemented a supervised machine learning model predicting crime occurrences.
- Secured 3rd prize out of 130+ teams in a national-level hackathon organized by Nagarro.

Search Through Video | Python, Video Analysis

- Developed a Python-based app for searching specific sub-topics within videos, enabling users to find the exact timestamp when a sub-topic is discussed without manual searching.
- Secured 1st prize in a hackathon conducted by Panjab University, Chandigarh.

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 as LxMLS Monitor to tutor students during the lab sessions of the Lisbon Machine Learning School.
- Reviewer at multiple conferences including ICWSM, ACL, EMNLP, AAAI etc.
- 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 Organiser 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 the 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.