KANAV MEHRA

kanav.mehra6@gmail.com | Homepage: kanav-mehra.github.io | LinkedIn: kanav-mehra | Github: kanav-mehra

EDUCATION

Indian Institute of Engineering Science and Technology, Shibpur   West Bengal, IN
Bachelor of Technology in Information Technology   2015 - 2019
GPA: 8.9/10.0 (First Class Honours)
Relevant Coursework: Artificial Intelligence, Data Structures and Algorithms, DBMS, Modelling & Simulation

PROFESSIONAL EXPERIENCE

PwC India   Kolkata, IN
Associate Consultant   July 2019 - Present
- Developed infrastructure and service monitoring along with key statistical visualizations to effectively highlight the regular performance and resource utilization of a large infrastructure with fit-for-purpose alert thresholds.
- Created geospatial visualizations to highlight spam attack trends and classify threats based on intensity of attacks. Implemented a spam prediction model using Splunk MLTK to forecast location specific spam attacks.

Data Science for Social Good Foundation
Data Scientist, Volunteer   July 2020 - October 2020
- Developed two novel methodologies that leverage Twitter discourse to characterize narratives and identify unmet needs in response to natural disasters, in partnership with the International Water Management Institute (IWMI).
- Built integrated models based on the concepts of network analysis and a wide range of NLP methods such as sentiment-analysis, text summarization and zero-shot text classification, which led to a submission to the Harvard CRCS Workshop on AI for Social Good at IJCAI (preprint available below).

Tredence Analytics Solutions   Bangalore, IN
Associate Intern   May 2018 - July 2018
- Developed an automated appraisal management system to create a repository for appraisal related data. It significantly reduced the overall process time ($\sim$70%).

RESEARCH EXPERIENCE

Indian Institute of Technology, Kharagpur   West Bengal, IN
Research Intern, Department of Computer Science   May 2017 - July 2017
- Worked on combining multiple algorithms to develop unsupervised and supervised ensemble summarization algorithms using graph processing and learning-to-rank algorithms.

ITRA-DiSARM internship, IIEST Shibpur   West Bengal, IN
Research Intern, Department of Computer Science   December 2016 - January 2017
- Evaluation and comparison of various system generated summaries using ROUGE metric. Applied the algorithms on different text documents, including the DUC datasets and microblogs collected from Twitter.

RESEARCH PROJECTS

Summarization of Microblogs for Disaster and Emergency Preparedness
Extracted information from social networking sites during disasters and used the same information to build a responsive system to provide useful information for rescue operations (using machine learning, specifically NLP and summarization techniques). **Advisor**: Dr. Saptarshi Ghosh, IIT Kharagpur, India

Autonomous Coaches for Managing Workplace Meetings
Designing a responsive humanoid chatbot for multi-party communication which simulates the behaviour of a human manager while taking autonomous control over a meeting. We also analyze the change in behaviour of the participants in different scenarios. **Advisor**: Dr. Malay Bhattacharyya, ISI Kolkata

PUBLICATIONS

Crayton, A., Fonseca, J., **Mehra, K.**, Ng, M., Ross, J., Sandoval-Castañeda, M. & von Gnechten, R. (2020). *Narratives and Needs: Analyzing Experiences of Cyclone Amphan Using Twitter Discourse.* arXiv preprint arXiv:2009.05560.

Dutta, S., Chandra, V., **Mehra, K.**, Ghatak, S., Das, A. & Ghosh, S. (2018). *Summarizing Microblogs during Emergency Events: A Comparison of Extractive Summarization Algorithms.* International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS), pp. 859-872

Dutta, S., Chandra, V., **Mehra, K.**, Das, A., Chakraborty, T. & Ghosh, S. (2018). *Ensemble Algorithms for Microblog Summarization.* IEEE Intelligent Systems, Special Issue on "Summarization of Things", vol. 33, no. 3, pp. 4–14

Mehra, K., Chandra, V. (2017). *Summarizing Microblogs for Emergency Relief and Preparedness.* European Conference on Information Retrieval (ECIR), SMERP Data Challenge Track, Aberdeen, Scotland

HONORS & AWARDS

PwC STAR&R Client Appreciation Award	2020
GAABESU Undergraduate Research Award for excellence in research	2019
President, The Debating Society of IIEST Shibpur	2019
SMERP Data Challenge - Summarization Track, SMERP Workshop, ECIR 2017 : 1st Position	2019

TECHNICAL SKILLS

Programming Languages: Python, C, SQL, Splunk SPL, PromQL
Technologies: NumPy, Sklearn, Pandas, Git, Keras, Elasticsearch, Splunk, Prometheus, Grafana