Tanya Chowdhury

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EDUCATION

University of Massachusetts, Amherst

4.0/4.0

MS/Ph.D. in Computer Science

Jan. 2020 – Present

Indraprastha Istitute of Information Technology(IIIT -Delhi)

9.31/10

B. Tech in Computer Science and Engineering (with Honours)

Aug. 2014 - May 2018

EXPERIENCE

AI Research Intern

June. 2022 – October. 2022

Genentech

South San Francisco/Remote

- Worked with the Medical language processing team towards developing specialized feature attribution methods for domain knowledge infused feed forward and graph neural networks.
- Validated feature attributions axiomatically as well as experimentally against known literature, for genes linked to Prostrate cancer discovery.

Software Engineer

July 2018 – July 2019

 $Myntra\ Designs$

Bengaluru, India

- Worked on improving user intent understanding in ambiguous search queries
- Implemented architectures to enable content AB testing to improve conversion.
- Built grpc services and apache-storm topologies. Used Solr and Elastic Search enterprise search engine.

Software Engineering Intern

May. 2017 – August. 2017

Google

Bengaluru, India

- Worked on a Proof of Concept project to build a Topically bundled view of Gmail and Inbox, to coexist with the existing date-wise sorted view.
- Experimented with different feature selections and clustering methods to determine best way to bundle mails into topically related clusters.
- Based on the clusters, recommended users to take bundle level collective action such as : Mark as Read, Move to Spam, Assign a label, filter etc.

Research Intern

Dec 2017 – May 2018

Indian Space Research Organisation

Hyderabad, India

- Improved classification from multi-resolution Panchromatic & Multi-spectral payloads using spectral and textural features.
- Used self organizing maps on five channels to map data into Water, Land, Cultivation, Habitat etc.

Publications

Tanya Chowdhury, Razieh Rahimi James Allan (2022, June). Equi-explanation Maps: Concise and Informative Global Summary Explanations. In 2022 ACM Conference on Fairness, Accountability, and Transparency (pp. 464-472).

Dey, Alvin, **Tanya Chowdhury**, Yash Kumar Atri, and Tanmoy Chakraborty. "Corpora Evaluation and System Bias Detection in Multi-document Summarization." In *Proceedings of Findings of EMNLP* (2020).

Chowdhury, Tanya, Sachin Kumar, and Tanmoy Chakraborty. "Neural Abstractive Summarization with Structural Attention." In *Proceedings of IJCAI* (2020).

Chowdhury, Tanya, and Tanmoy Chakraborty. "CQASUMM: Building references for community question answering summarization corpora." In Proceedings of the ACM India Joint International Conference on Data Science and Management of Data, pp. 18-26. 2019.

Mukherjee, Arpan, Shubhi Tiwari, **Tanya Chowdhury**, and Tanmoy Chakraborty. "Automatic Curation of Content Tables for Educational Videos." In *Proceedings of the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval*, pp. 1329-1332. 2019.

Chowdhury, Tanya, Aashay Mittal, and Tanmoy Chakraborty. "VIZ-Wiki: Generating visual summaries to factoid threads in community question answering services." In *Companion Proceedings of the The Web Conference 2018*, pp. 231-234. 2018.

TEACHING EXPERIENCE

CS220 Programming Methodology Responsible for curating and conducting discussion sessions, holding office hours and grading	UMass Amherst Sep. 2020 – Dec. 2020
CS145 Representing, Storing, and Retrieving Information Responsible for holding office hours and grading	UMass Amherst Jan. 2020 – May 2020
MTH 310 Graph Theory Responsible for conducting weekly discussion sessions, hosting quizes and grading	IIIT-Delhi Jan. 2018 – May. 2018
CSE 121 Discrete Mathematics Head TA, responsible for curating homeworks and exams, supervising grading.	IIIT-Delhi Aug. 2017 – Dec. 2017

Honors

Member of Dean's list for academic excellence at IIIT-Delhi for 3 academic years.

Received the TA award for Discrete Mathematics: usually conferred only to PhD students in IIIT-Delhi. Recipient Invite and Travel grant, Google I/O 2017.

Received full scholarship from CBSE to pursue study in pure maths or science streams.

2nd from state of Gujarat in Indian National Mathematics Olympiad 2014 amongst 12th grade students.

CONTACT INFORMATION

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