

## **EDUCATION**

University of Southern California

Los Angeles, CA

Doctor of Philosophy, Computer Science; CGPA: 3.9/4

Aug. 2021 - Present

Email: brihijos@usc.edu

Website: brihijoshi.github.io

- o Advised By: Xiang Ren and Swabha Swayamdipta
- Apple Scholars in AI/ML PhD Fellowship, AY 2024-26
- Amazon ML PhD Fellow, AY 2023-24
- o USC Annenberg PhD Fellow, AY 2021-22

# Indraprastha Institute of Information Technology

New Delhi, India

Aug. 2016 - Dec 2020

 $Bachelor\ of\ Technology,\ Computer\ Science\ and\ Engineering;\ CGPA:\ 9.30/10$ 

• Received the Innovative Student Projects Award for **best thesis in Computer Science** from the Indian National Academy of Engineering. One of the highest honors for undergraduates in India.

• Snap Research Scholarship, 2019

#### Publications and Preprints

- Jaspreet Ranjit, **Brihi Joshi**, Rebecca Dorn, Laura Petry, Olga Koumoundouros, Jayne Bottarini, Peichen Liu, Eric Rice, Swabha Swayamdipta. OATH-Frames: Characterizing Online Attitudes Towards Homelessness via LLM Assistants. *Under Submission*
- Brihi Joshi, Sriram Venkatapathy, Anjali Narayan-Chen, Alessandra Cervone, Shereen Oraby, Mohit Bansal, Nanyun Peng, Haw-Shiuan Chang. CoKe: A Simple Yet Effective Approach to Story Evaluation via Chain-of-Keyword Rationalization. *Under Submission*
- Sahana Ramnath, **Brihi Joshi**, Skyler Hallinan, Ximing Lu, Liunian Harold Li, Aaron Chan, Jack Hessel, Yejin Choi, Xiang Ren. Tailoring Self-Rationalizers with Multi-Reward Distillation. *ICLR 2024* and SetLLM@ICLR 2024.
- Aaron Chan\*, Zhiyuan Zeng\*, Wyatt Lake, **Brihi Joshi**, Hanjie Chen, Xiang Ren. KNIFE: Knowledge Distillation with Free-Text Rationales. *TrustML-(un)Limited@ICLR*, 2023
- Brihi Joshi\*, Ziyi Liu\*, Sahana Ramnath, Aaron Chan, Zhewei Tong, Shaoliang Nie, Qifan Wang, Yejin Choi and Xiang Ren. Are Machine Rationales (Not) Useful to Humans? Measuring and Improving Human Utility of Free-text Rationales. ACL 2023 and trAIt@CHI 2023
- Dong-Ho Lee\*, Akshen Kadakia\*, Brihi Joshi, Aaron Chan, Ziyi Liu, Takashi Shibuya, Ryosuke Mitani, Toshiyuki Sekiya, Jay Pujara, Xiang Ren. XMD: An End-to-End Framework for Interactive Explanation-Based Debugging of NLP Models. ACL Demo Track 2023
- Brihi Joshi\*, Aaron Chan\*, Ziyi Liu\*, Shaoliang Nie, Maziar Sanjabi, Hamed Firooz, Xiang Ren. ER-Test: Evaluating Explanation Regularization Methods for NLP Models. Findings of EMNLP 2022 and TrustNLP@NAACL 2022
- Brihi Joshi, Neil Shah, Francesco Barbieri and Leonardo Neves. The Devil is in the Details: Evaluating Limitations of Transformer-based Methods for Granular Tasks. In *The 28th ACM International Conference on Computational Linguistics (COLING 2020)*.
- Brihi Joshi\*, Aditya Chetan\*, Hridoy Sankar Dutta, Tanmoy Chakraborty. CoReRank: Ranking to Detect Users Involved in Blackmarket-based Collusive Retweeting Activities. In *The 12th ACM International Conference on Web Search and Data Mining (WSDM 2019)*. (Acceptance Rate: 16%, CORE2018 A\*)
- Udit Arora, Hridoy Sankar Dutta, **Brihi Joshi\***, Aditya Chetan\*, Tanmoy Chakraborty. Analyzing and Detecting Collusive Users Involved in Blackmarket Retweeting Activities. In *ACM Transactions on Intelligent Systems and Technology (TIST)*. (Impact Factor: **3.971**)

- Brihi Joshi\*, Amogh Gulati\*, Chirag Jain\*, Jainendra Shukla. It's Not What They Play, It's What You Hear: Understanding Perceived vs. Induced Emotions in Hindustani Classical Music. In 22nd ACM International Conference on Multimodal Interaction, Late Breaking Reports (ICMI 2020).
- Brihi Joshi\*, Shravika Mittal, Aditya Chetan. Did You "Read" the Next Episode? Using Textual Cues for Predicting Podcast Popularity. In First Workshop on NLP for Music and Audio (NLP4MusA) at International Society for Music Information Retrieval Conference (ISMIR 2020).
- Hridoy Sankar Dutta, **Brihi Joshi\***, Aditya Chetan\*, Tanmoy Chakraborty. Retweet Us, We Will Retweet You: Spotting Collusive Retweeters Involved in Blackmarket Services. In *The 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2018)*. (Acceptance Rate: 15%)
- Nishtha Madaan, Gautam Singh, Sameep Mehta, Aditya Chetan\*, **Brihi Joshi\***. Generating Clues for Gender based Occupation De-biasing in Text arXiv:1804.03839 [cs.CL]
- \* Equal Contribution

## Internships and Work Experience

•	Apple ML Research Intern, Apple AIML: Adaptive Devices and Platforms Team	Seattle, WA May 2024 – present
•	Amazon Applied Scientist II Intern, Alexa AI Natural Understanding: NLG Team	Cambridge, MA May 2023 – Aug. 2023
•	Goldman Sachs Analyst (Full Time), Regulatory Engineering Team	Bangalore, India Dec. 2020 – July 2021
•	Snap Inc. Research Intern, Computational Social Science Team	Los Angeles, CA Sep. 2019 – Dec. 2019
•	Goldman Sachs Analyst Intern, Regulatory Engineering Team	Bangalore, India May 2019 - July 2019
•	IBM Research Research Intern, Fairness in ML Team	New Delhi, India May 2018 - July 2018

#### Awards

- Apple Scholars in AL/ML PhD Fellowship: Awarded for PhD research in Human Centred AI and Explainability.
- Amazon ML PhD Fellowship: Awarded for work in Explainable NLP, for AY 2023-24.
- Indian National Academy of Engineering Undergraduate Thesis Award 2021: Awarded for research done as a part of undergraduate thesis in the Computer and Information Sciences Domain.
- Annenberg Fellowship: Awarded for admission to the PhD program at the University of Southern California.
- Snap Research Scholarship 2019: Awarded for research done in the field of Machine Learning. Award includes 10,000 USD and an offer to intern at Snap Research, USA. Only scholar from India!
- AAAI 2020 Undergraduate Consortium: Accepted to present my thesis at the AAAI 2020 Undergraduate consortium. Includes scholarship to attend to attend AAAI 2020
- Microsoft Research India Travel Grant: Awarded travel support of 50000 INR for visiting WSDM 2019
- ACM-W Scholarship: Awarded travel support of 1200 USD for visiting WSDM 2019
- Google Women Techmakers Scholarship, 2018: Awarded to students who work for diversity and inclusion in the field of Computer Science.
- Best Technical Poster Runner-up at GHCI 2018: Received for the project, "Generating Clues for Gender based Occupation De-biasing in Text"
- Dean's Award for Innovation R&D: Awarded to students who work on Research projects beyond coursework. Awarded for the academic years 2016-17 and 2017-18.
- Dean's List of Academic Affairs: Awarded to students who demonstrate excellence in an academic year. Awarded for the academic year 2016-17 and 2018-19.
- Grace Hoppers Celebration India (GHCI) Scholarship, 2018: Awarded travel grant and scholarship to attend the GHCI conference.

## SERVICE AND LEADERSHIP

- Core Organizer, NLP With Friends: Core Organizer of NLP with Friends, an online seminar series for PhD students to discuss all things NLP Research.
- Director, Women Who Code Delhi: Lead the Delhi Chapter of Women Who Code, a non-profit organisation for upliftment of minorities in technology.
- Workshop Organizer, Broadening Research Collaborations in ML, NeurIPS 2022: PC member and organizer for new workshop at NeurIPS aimed towards making ML research more accessible.
- Reviewer: EMNLP 2022, ACL 2023, EMNLP 2023, EMNLP 2024
- Grant Writing: Utilizing Explanations for Model Refinement in Alexa: Fairness in AI 2022 award and writing contributions in multiple DARPA and IARPA project proposals under the supervision of Prof. Xiang Ren.
- Mentoring: Keyu He (USC CS Undergrad, CURVE Fellowship Winner and Summer 2024), Ziyi Liu (USC MS CS, Joined USC CS PhD in Fall 2023), Zhewei Tong (Viterbi Tsinghua Undergraduate Summer Research Program, Joined CMU MS CS in Fall 2023), Pushpdeep Singh (Indo-US Science and Technology Forum).