

## EDUCATION

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- **University of Illinois at Chicago (Transferred from K-State)** Chicago, IL  
*PhD in Computer Science; CGPA: 4.00/4.00* 2019 – Now
- **Kansas State University** Manhattan, KS  
*Computer Science; CGPA: 4.00/4.00* 2018 – 2019
- **Calcutta Institute of Engineering and Management** Kolkata, India  
*Bachelor of Technology in Computer Science and Engineering; DGPA: 8.06/10* 2014 – 2017

## EXPERIENCE

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- **Bloomberg** New York, NY  
*Data Science Research Intern* May 2020 - August 2020 and May 2021 - August 2021
  - Worked on Answer-Agnostic Question Generation and Novelty-Controlled Paraphrase Generation using prompt tuning (leading to publication).
- **University of Illinois Chicago** Chicago, IL  
*Research Assistant* June 2019 - May 2020, August 2020 - May 2021, August 2021-Now
  - Developed several novel recursive neural architectures. Worked on several Keyphrase Generation projects, Contrastive Learning, Curriculum Learning, Out-of-Distribution Generalization, Grounded Language Learning, Language Models, Named Entity Recognition, Question Generation, and Transformers.
- **Kansas State University** Manhattan, KS  
*Research Assistant* Aug 2018 - May 2019
  - Worked on Named Entity Recognition and Keyphrase Extraction on Tweets.
- **RBIC Solutions**  
*Freelance Full Stack Development* Sep 2016 - June 2017
  - Developed a full-stack application for restaurant menu management.

## SELECTED PROJECTS

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(See More: <https://jrc1995.github.io/>)

- **LLM Zero-Shot Prompt Tech:** Implementation of an LLM prompting pipeline combined with wrappers for auto-decomposing reasoning steps and for search through the reasoning-step-space (eg. by beam search, MCTS etc.) guided by self-evaluation.
- **Conversational Bot:** Implemented a Chatbot based on hybrid neural retrieval and generation mechanism with Text2Speech Synthesis on top.
- **Deep Learning Optimizers:** Implemented a custom PyTorch optimizer library to allow synergy among optimizer techniques.
- **NER on Social Media:** Implemented and empirically evaluated various NER frameworks and noise-reduction strategies.

## PAPERS

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- Modeling Hierarchical Structures with Continuous Recursive Neural Networks - Jishnu Ray Chowdhury, and Cornelia Caragea. In Proceedings of ICML 2021 (Long Talk)
- Novelty Controlled Paraphrase Generation with Retrieval Augmented Conditional Prompt Tuning - Jishnu Ray Chowdhury, Yong Zhuang, Shuyi Wang. In Proceedings of AAAI 2022 (Oral)
- Beam Tree Recursive Cells - Jishnu Ray Chowdhury, and Cornelia Caragea. In Proceedings of ICML 2023
- Efficient Beam Tree Recursion - Jishnu Ray Chowdhury, and Cornelia Caragea. In Proceedings of NeurIPS 2023
- Recursion in Recursion - Jishnu Ray Chowdhury, and Cornelia Caragea. In Proceedings of NeurIPS 2023
- Monotonic Location Attention for Length Generalization - Jishnu Ray Chowdhury, and Cornelia Caragea. In Proceedings of ICML 2023
- KPDR0P: Improving Absent Keyphrase Generation - Jishnu Ray Chowdhury, Seoyeon Park, Tuhin Kundu, and Cornelia Caragea. In Findings of EMNLP 2022

- Keyphrase Extraction from Disaster-related Tweets. - Jishnu Ray Chowdhury, Cornelia Caragea, and Doina Caragea. In Proceedings of WWW 2019
- Cross-Lingual Disaster-related Multi-label Tweet Classification with Manifold Mixup.-Jishnu Ray Chowdhury, Cornelia Caragea, and Doina Caragea. In Proceedings of ACL SRW 2020
- Data Augmentation for Low-Resource Keyphrase Generation - Kirshna Garg, Jishnu Ray Chowdhury, and Cornelia Caragea. In Findings of ACL 2023
- Neural Keyphrase Generation: Analysis and Evaluation - Tuhin Kundu, Jishnu Ray Chowdhury, and Cornelia Caragea. ArXiv 2023
- Keyphrase Generation Beyond the Boundaries of Title and Abstract - Krishna Garg, Jishnu Ray Chowdhury, Cornelia Caragea. In Findings of EMNLP 2022
- On the Evaluation of Answer-Agnostic Paragraph-level Multi-Question Generation -Jishnu Ray Chowdhury, Debanjan Mahata, Cornelia Caragea. Arxiv 2020
- On Identifying Hashtags in Disaster Twitter Data. - Jishnu Ray Chowdhury, Cornelia Caragea, and Doina Caragea. In Proceedings of AAAI 2020

## SKILLS

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- Python, Pytorch, Huggingface, Tensorflow, SQL, NoSQL, Vue, NodeJS, JavaScript, Java, C, C++

## SERVICES

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- ICLR 2024 Reviewer, AAAI 2024 Reviewer, EMNLP 2023 Reviewer, NeurIPS 2023 Reviewer, ACL 2023 Reviewer, ICLR 2023 Reviewer, AAAI 2023 Reviewer, ACL 2021 Reviewer, Multiple ARR Reviews