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#### **EDUCATION**

• University of Illinois Chicago Chicago, IL PhD in Computer Science; CGPA: 4.00/4.00

2019 - Now

• Kansas State University

Computer Science; CGPA: 4.00/4.00

Manhattan, KS 2018 - 2019

• Calcutta Institute of Enginneering and Management

Bachelor of Technology in Computer Science and Engineering; DGPA: 8.06/10

Kolkata, India 2014 - 2017

### EXPERIENCE

## • University of Illinois Chicago

Research Assistant

Chicago, IL June 2019 - Now

o Research Assistant - Machine Learning and Natural language Processing: Enhancing keyphrase extraction with citation information. Disaster-related Tweet classification. Preparing Twitter Keyphrase extraction and classification dataset. Exploring keyphrase generation and potential ways to improve Transformers.

• Kansas State University

Manhattan, KS Aug 2018 - May 2019

Research Assistant

• Research Assistant - Machine Learning and Natural language Processing: Named Entity Recognition on tweets. Keyphrase Extraction from Tweets. Proposed new evaluation method for keyphrase extraction.

• RBIC Solutions

Freelancing

Sep 2016 - June 2017

• Freelance Software Developer: Full-stack development of a Menu Management Module. The module allows companies to manage recipes, analyze the effect of ingredient price changes on food cost, develop menus, and analyze national or regional food costs based on sales information.

# Projects (See https://jrc1995.github.io/)

- Conversational Bot: Chatbot based on hybrid neural retrieval and generation mechanism with TTS on top.
- Disaster Classification: Experiments with BERT using attention-based and alternatively capsule-routing based layer aggregation and hidden-state aggregation for disaster-related Tweet classification.
- Disaster-related Keyphrase Extraction: Disaster-related Keyphrase Extraction dataset construction and using LSTM+ELMo based model with multi-task learning and IPA and phonological features for prediction
- Continuous Sparsification and Sparse Representations: Applying network sparsification techniques for NLP tasks like Named Entity Recognition.
- Abstractive Summarization and Translation: Machine Translation (with Transformers) and Summarization (with Transformer, LSTM) and other experimental models
- Reddit-like Website: Reddit-like website with Vue, MongoDB, MariaDB, Axios etc.
- Question-Answering: QA with Dynamic Memory Network and R-NET
- Keyphrase Extraction, Extractive Summarization: Implemented using RAKE and Text-Rank (from scratch)
- Image Classification: Wide-Res-Net and ResNeXt on CIFAR10. Also, Lung Nodules Classification with ConvNet.
- IRMv1 and  $\beta$ -VAE based models: Experimenting with beta-VAE based disentangled representations and IRMv1 for robust image classification.

### **Publications**

- Jishnu Ray Chowdhury, Cornelia Caragea, and Doina Caragea. "Keyphrase Extraction from Disaster-related Tweets." In Proceedings of WWW 2019
- Jishnu Ray Chowdhury, Cornelia Caragea, and Doina Caragea. "On Identifying Hashtags in Disaster Twitter Data." In Proceedings of AAAI 2020

## SKILLS

• Pytorch, Tensorflow, SQL, NoSQL, MongoDB, Java, JavaScript, HTML, CSS, Vue, PHP, C, C++, Octave