Md Mustafizur Rahman

https://www.ischool.utexas.edu/~nahid/

Research Areas

Information Retrieval (IR), Natural Language Processing (NLP), and Deep Learning

EDUCATION

University of Texas at Austin

Austin, TX

Ph.D. in Information Science (in progress); GPA: 3.86

Aug. 2016 – Present

University of Virginia

Charlottesville, VA

Email: nahid@utexas.edu

Mobile: +1-434-227-3832

Masters in Computer Science; GPA: 3.72

Aug. 2014 – May 2016

Bangladesh University of Engineering and Technology

Dhaka, Bangladesh Mar. 2011 – Aug. 2013

M.Sc. in Computer Science and Engineering; GPA: 3.83

Bangladesh University of Engineering and Technology B.Sc. in Computer Science and Engineering; GPA: 3.95

Dhaka, Bangladesh Jan. 2006 – Feb. 2011

Professional Experience

PhD Research Intern

Samsung Research America, CA

Present

Open Domain Question Answering Developing a non-contextual question answering system using reading comprehension deep learning model. Skills: Python, Keras, Theano.

Applied Machine Learning Intern

Los Alamos National Laboratory, Los Alamos, NM

Summer 2017

Semi-supervised Deep Learning for NLP - Developed a semi-supervised graph based regularization deep learning model for cancer pathology reports. **Skills**: Python, Keras, Theano.

Graduate Research Assistant

University of Texas at Austin, Austin, TX

Aug. 2016 - Present

Efficient Test Collection Construction via Active Learning. (Rahman et al., arXiv:1801.05605, January 2018). Skills: Python, Indri, Active Learning.

Answer Selection in Non-factoid Question Answering using Deep Learning - Developed a Convolutional Neural Network (CNN) based approach for non-factoid question answering. Skills: Python, Keras.

Graduate Research Assistant

University of Virginia, Charlottesville, VA

 $Summer\ 2015$

Hidden Topic Sentiment Model. (Rahman and Wang, WWW 2016). Skills: Java, Apache OpenNLP, HMM.

SELECTED PUBLICATIONS [COMPLETE LIST]

- 1. Kezban Dilek Onal, Ye Zhang, Ismail Sengor Altingovde, **Md Mustafizur Rahman**, and others, "Neural Information Retrieval: At the End of the Early Years," *Information Retrieval Journal*, Springer, 2018.
- 2. Md Mustafizur Rahman, Mucahid Kutlu, Tamer Elsayed, and Matthew Lease, "Efficient Test Collection Construction via Active Learning," Technical report, January 2018. arXiv:1801.05605.
- 3. Malay Bhattacharyya, Yoshihiko Suhara, Md Mustafizur Rahman, and Markus Krause, "Possible Confounds in Word-based Semantic Similarity Test Data," 20th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017), Portland, OR, USA, 2017. Blog: https://humancomputation.com/blog/?p=9492
- 4. Md Mustafizur Rahman and Hongning Wang, "Hidden Topic Sentiment Model," 25th International World Wide Web Conference (WWW 2016), Montreal, Canada, 2016. (Acceptance Rate: 16%.)

Programming language: Java, Python

Deep Learning: CNN, LSTM. Framework - Keras

Machine Learning: Naïve Bayes, Logistic Regression, Linear Regression, SVM, K-Nearest Neighbour, K-means, Expectation Maximization (EM), Hidden Markov Model (HMM), Active Learning. Co-training, Self-training, Semi-supervised Learning and Graph Regularization

Text mining: Probabilistic Latent Semantic Analysis (pLSA)