BIOGRAPHICAL SKETCH

NAME: Hasan, Md Mehedi

eRA COMMONS USER NAME (credential, e.g., agency login): MDHASAN

POSITION TITLE: Graduate Teaching Assistant of Computer Science

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education.*)

INSTITUTION AND LOCATION	DEGREE (*if applicable*)	Completion Date (*or expected*) MM/YYYY	FIELD OF STUDY
Bangladesh University of Engineering and Technology, Dhaka, Bangladesh	B.S.	03/2009	Computer Science and Engineering
Wayne State University, Detroit, MI	Ph.D.	05/2019	Computer Science

A. Personal Statement

I have the expertise and motivation necessary to successfully carry out the proposed research project. I have a background in computer science, with specific expertise in health informatics, machine learning, and textual data analytics. My research includes automatic annotation of clinical text, information extraction from electronic health records for improving the study of cancer risk and outcomes. As a graduate reserach assistant on several university- and NIH-funded grants, I successfully collaborated with other researchers, and produced the following publications.

1. Hasan, M., Kotov, A., Carcone, A.I., Dong, M., Naar, S. and Hartlieb, K.B. (2016). A study of the effectiveness of machine learning methods for classification of clinical interview fragments into a large number of categories. Journal of biomedical informatics, 62, 21-31.
2. Hasan, M., Kotov, A., Mohan, A., Lu, S. and Stieg, P.M. (2016). Feedback or Research: Separating Prepurchase from Post-purchase Consumer Reviews. In European Conference on Information Retrieval, 682-688. Springer International Publishing.
3. Kotov, A., Hasan, M., Carcone, A., Dong, M., Naar-King, S. and BroganHartlieb, K. (2015). Interpretable probabilistic latent variable models for automatic annotation of clinical text. In AMIA Annual Symposium Proceedings, 2015, 785. American Medical Informatics Association.

B. Positions and Honors

Positions and Employment

2015–2017	Graduate Research Assistant, Department of Computer Science, Wayne State University, Detroit, MI
2017–2017	Part-time Faculty, Department of Computer Science, Wayne State University, Detroit, MI
2017–	Graduate Teaching Assistant, Department of Computer Science, Wayne State University, Detroit, MI

Other Experience and Professional Memberships

2010–2014	System Analyst and Software Developer, KB Group UK, Dhaka, Bangladesh.
2015–2016	Research Volunteer, Henry Ford Health Systems, Detroit, MI.
2016–2016	Software Engineer Summer Intern, Title Source Inc., Detroit, MI.
2017–	Reviewer, Annual Symposium of American Medical Informatics Association.
2017–	Member, Association for Computing Machinery.

Honors

2003	Excellence in H.S.C results, Islamic Foundation, Ministry of Religious Affairs, Bangladesh.
2004	University Merit Scholarship, Bangladesh University of Engineering and Technology.
2014	Thomas C. Rumble Fellowship, Wayne State University, Detroit, MI.

C. Contribution to Science

Manual encoding has been used to annotate clinical text of motivational interview transcripts for many years, which is time consuming and resource intensive. However, my reserach shown that state-of-the-art machine learning methods can be used as a cheap alternate for the annotation that can facilitate researchers to establish a causal relationship between different communication strategies and desired behavioral outcomes without having to repeatedly wade through pages of interview transcripts.

Complete List of Published Work in MyBibliography:

https://www.ncbi.nlm.nih.gov/sites/myncbi/1H1Fbtu2l5kQn/bibliography/53130053/public/?sort=date

D. Additional Information: Research Support and/or Scholastic Performance

Ongoing Research Support

R21 DK108071 Idalski Carcone & Kotov (PIs) 2016–2018
Automated Coding of eCoaching Exchanges to Promote Healthier Eating.
The goal of the study is to automate qualitative communication coding using machine-learning computer science technology.
Role: Graduate Research Assistant

Completed Research Support

Ford Motor Company Kotov (PI) 2014–2015
Extraction of actionable insights from online automotive consumer reviews.
The goal of this project was to extract actionable insights from online automotive consumer reviews.
Role: Graduate Research Assistant

R21 DK100760 Idalski Carcone (PI) 2014–2016
Patient-Provider Communication to Promote Health Behavior Change in African American Adolescents.
The goal of this study was to identify provider communication behaviors that predict motivation for behavior change and are related to changes in weight-related health behaviors.
Role: Graduate Research Assistant

NHLBI 1U01HL097889-01 Naar–King & Jen (PIs) 2014-2016
Provider Communication Behaviors that Predict Motivation to Change in Black Adolescents with Obesity.
The goal of this research was to identify communication behaviors used by weight loss counselors that mostly strongly predicted Black adolescents' motivational statements.
Role: Graduate Research Assistant

Office of Vice President for Research at Wayne State University 2014–2016
Electronic Health Records Information Extraction for Improving the Study of Cancer Risk and Outcomes.
The goal of the research was to extract information from Electronic Health Records for improving the study of cancer risk and outcomes.
Role: Graduate Research Assistant