

Mahbubul Hasan

CONTACT INFORMATION	364 Dunn Hall, Memphis, TN, 38152 Website: www.mahbubulhasan.net LinkedIn: https://www.linkedin.com/in/m-hasan/	E-mail: mhasan1@memphis.edu Phone: + 1-901-634-5074
INTERESTS	<ul style="list-style-type: none">• Deep Learning and Data Privacy, Applied Statistics	
EDUCATION	University of Memphis , Memphis, TN	2023 (expected)
	<ul style="list-style-type: none">• Ph.D. in Applied Statistics, Math Dept., College of Arts and Sciences(CAS) GPA: 3.83/4• Advisor: Prof. Dale Bowman.• Ph.D. Topic: A state-of-the-art survey on deep learning theory and data privacy.	
	University of Memphis , Memphis, TN.	Since Summer 2018
	<ul style="list-style-type: none">• Master of Science in Information Systems - MSIS. GPA: 3.73/4• Project-I: <i>Applying Machine Learning Models to Predict Cable Subscriptions</i>• Project-II: <i>Emotional Triggers and Shopper's Engagement in Viral Advertising</i> SMA, 2020• Advisor: Prof. Srikar Velichety	
	University of Memphis , Memphis, TN.	Fall 2014 - Summer 2018
	<ul style="list-style-type: none">• Master of Science in Educational Psychology and Research. GPA: 3.51/4• Major-I: <i>Graduate Certificate in Quantitative Methods (GCQM)</i>• Advisor: Prof. Denise Winsor	
	University of Dhaka , Dhaka, Bangladesh.	Fall 2006 - Summer 2011
	<ul style="list-style-type: none">• Bachelor of Social Science with Honours. GPA: 3.47/4(overall) 3rd and 4th year: 3.70/4• Advisor: Prof. Md. Azharul Islam	
TECHNICAL SKILLS	<ul style="list-style-type: none">• <i>Programming Languages:</i> R(4 years), Python(2 years), R Shiny(3 years), SAS, Julia.• <i>Database Other Technologies:</i> MongoDB, GraphDB, MATLAB, Overleaf/LaTex, SQL, MySQL, SQLite, OpenCV, Cross Platform(Mac, Windows), Hadoop, Tableau, PowerBI, AWS.	
PROFESSIONAL EXPERIENCE	Learner Data Institute & Inst. for Intelligence Systems at the UofM	Since May 2021 Research Assistant.
	Epidemiology and Biostatistics Div at the University of M	May 2021– May 2021 Research Assistant.
	Graduate School at the University of Memphis	Aug 2017– Dec 2020 GSA President & Research Assistant
	Smith and Nephew	May 2019 – June 2019 Research/Analyst Intern
	Social Media Lab at the University of Memphis	Aug 2016 – May 2017 Research Assistant/Data Analyst
	SPIRIT Lab at the University of Memphis	Aug 2014 – May 2016 Research Assistant/Data Analyst
AWARDS & ACHIEVEMENTS	<ul style="list-style-type: none">• Winner of the Student Research Award in American Statistical A WT symposium 2021• GSA and Graduate School Student Success Award in the annual GSA award 2021• Research Fellowship with full tuition waiver and stipend for PhD research at UofM 2021• Best Presentation Award in Dr. SP Wong Research Day in NLP in U of M 2020• Research Fellowship with full tuition waiver and stipend for MS in IS at UofM 2017-2020• Distinguish Research Award, Student Research Forum at U of M 2017• BD-Sweden PhD Research Travel Grant 2016• Most Intellectual Student Award, Peer Power Foundation, Memphis, TN 2016• Winner of the Student Research Award in the Student Research Forum at U of M 2015• Research Fellowship with full tuition waiver and stipend for MS at UofM 2014-2017• Eye of the Tiger Award Student award from Peer Power Foundation, Memphis, TN 2015• Duke of Edinburgh Student Bronze Award from Duke of Edinburgh, Edinburgh, UK 2013	

SELECTED
PROJECTS

- **Deep Learning with Privacy & Assessment: Funded by NSF** 05/2021 to Present
Developing deep learning models for cognitive assessment and differential privacy
Tools: R, Python, Google Colab GPU/TPU, High-performance computing(HPC), TensorFlow.
- **Maternal DNA Methylation: Funded by NIH** 01/2021 to 05/2021
Developed machine learning models for a proposed a two-step screening approach to screen high-dimensional epigenetic data (450k CpGs) from Isle of Wight birth cohort study (three-generational data, UK)
Tools: R, SAS, High-performance computing(HPC), K-means clustering.

SELECTED
PUBLICATIONS

- **Deep transfer learning and DCNN via ResNet**
Hasan, M., Felix, H.,
Submitted to 7th International Conference on Machine Learning Technologies (ICMLT 2022)
- **Variational autoencoders to estimate MIRT models (2nd place winner)**
Hasan, M., Bowman, D., Deng, L., Yang, C.,
American Statistical Association TN fall meeting, 2021
Also presented at LDI talk, and Agency Lab (**Invited Talk**)
- **Emotional Triggers and Engagement in Viral Advertising (Best NLP Paper Award)**
Hasan, M.,
American Statistical Association TN fall meeting, 2021
Also presented at SP Wang annual seminar, and WTASA, 2019
- **Epistemological thinking while using iPad science application(1st place winner)**
Hasan, M., Winsor, D. L.,
Annual Meeting of American Educational Research Conference, 2017
Also presented at Student Research Forum, SRF 2015
- **Social networking sites and its association with loneliness**
Hasan, M., Yang, C.-c
Biannual Meeting of Society for Research on Adolescence(Poster), 2016
Also presented at UM Student Research Forum(SRF 2017)

TECHNICAL
REPORTS

- **VRNN, LSTM,and GRU Machine Translation**
Hasan, M., Felix, H., 2021
- **Auto-encoder for document denoising and generating synthesis samples using generative models via CIFAR 10**
Hasan, M., Felix., H 2021
- **A New Gibbs Sampler for Bayesian Approach for Integrating Multilevel Priors via Simulated Data)**
Hasan, M., Barton, T., 2021
- **Comparing math attitudes and behaviours the United States to the top five performing countries in PISA 2012**
Hasan, M., Hosman, E., Payne, A 2016

TALKS

- **Deep learning and AI with Python**
Pie AI: Memphis - Breaking into AI,Deepleanring.ai, 2021,(**Invited Talk**)
- **Variational auto-encoders for knowledge tracing**
Agency Lab, Dhaka, Bangladesh, 2021
- **Social Psychology and Human Development**
Peer Power Foundation, Memphis, TN. 2017(**Invited Talk**)

SELECTED
MEDIA
COVERAGE

**Mobile Technologies for Cognitive Modeling-U of Memphis Media
Digital Age-Young NITE at ATN News**

TEACHING **Lecture on Deeplearning and AI with Python/R in the IISSO meetup), Fall 2021**
Teaching Assistant
• **Lifespan and Human Development**
• **ACT Math Instructor**

SERVICE **Chair** Student Research Forum, 2017-2020
University Ambassador Deeplearning.ai, since 2021
Book Reviewer Sage Press
Conference and Journal Reviewing:
• Machine Learning with Applications
• Statistics Probability Letters
Workshop Program Committee:
• Deep learning and AI meetups at IISSO,2019
• Co-organized the annual research event with Graduate School which showcases the diverse research of undergraduate and graduate students: 120 plus posters, \$3000 research award for students from 12 schools,2017 - 2020
• Co-organized Doctoral Students Scholars for Interdisciplinary Research Round table,2019

Last update: December 24, 2021