

# MD NAIMUL HOQUE

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## RESEARCH INTEREST

Human-Computer Interaction, Visual Analytics, and Human-Centered AI.

## EDUCATION

University of Maryland, College Park, MD, USA

Fall 2020 –

Ph.D. in Information Sciences

Human-Computer Interaction Lab (HCIL), *advisor*: Niklas Elmqvist.

Stony Brook University, NY, USA

Fall 2018-Summer 2020

M.S. in Computer Science, CGPA: 3.9, *advisor*: Klaus Mueller.

University of Dhaka, Dhaka, Bangladesh

Jan 2011 – Jan 2015

B.Sc. in Computer Science and Engineering. CGPA: 3.60.

## PUBLICATIONS

- **Md Naimul Hoque**, Bhavya Ghai, Niklas Elmqvist. DramatVis Personae: Visual Text Analytics for Guiding Character Development and Avoiding Stereotypes in Creative Storytelling. (In submission)
- **Md Naimul Hoque**, Klaus Mueller. Outcome-Explorer: A Causality Guided Interactive Visual Interface for Interpretable Algorithmic Decision Making. *IEEE Transaction on Visualization and Computer Graphics*. 2021. ([preprint](#))
- Bhavya Ghai, **Md Naimul Hoque**, Klaus Mueller. WordBias: An Interactive Visual Tool for Exploring Intersectional Social Biases Encoded in Word Embeddings. *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*. 2021. ([pdf](#)) ([github](#))
- **Md Naimul Hoque**, Nazmus Saquib, Syed Masum Billah, and Klaus Mueller. Toward Interactively Balancing the Screen Time of Actors Based on Observable Phenotypic Traits in Live Telecast. *ACM Conference on Computer-Supported Cooperative Work and Social computing (CSCW)*. 2020. ([pdf](#))
- **Md Naimul Hoque**, Choudhury Farhan Ahmed, Nicolas Lachiche., Carson K. Leung, Hao Zhang. Reframing in Clustering. *IEEE 28th International Conference on Tools with Artificial Intelligence (ICTAI)*. 2016. ([pdf](#))
- **Md Naimul Hoque**, Darius Coelho, Klaus Mueller. Examining the Visualization Practices of Data Scientists on Kaggle, *InfoVis Poster*, 2019.
- Md Mehedi Hassan, Ashik Adnan, Asif M. Saleheen, **Md Naimul Hoque**. Understanding the Patterns of Crime Reports in a Popular Bangladeshi Newspaper. *Companion of ACM CSCW 2018*. ([pdf](#))
- **Md Naimul Hoque**, Rawshan E. Fatima, Manash Mandal, Nazmus Saquib. 2017. Evaluating gender portrayal in Bangladeshi TV. *Machine Learning for the Developing World, NIPS 2017 Workshop*. ([pdf](#))

## EXPERIENCE

### Research Intern

Summer 2021

Bosch Research, advisor: Liang Guo

Designed an interactive interface to interpret visual concepts learned by a pixelwise encoder. We used VQ-VAE to learn a discrete latent space. The interface also allows knowledge injection to the original model, gathered from the interface, for better performance.

### Graduate Teaching Assistant

Fall 2020 – Fall 2021

University of Maryland

Courses: Introduction to Data Visualization; Introduction to Data Science.

### Graduate Research Assistant

Summer 2019-Summer 2020

Stony brook University

Projects: Visual causal model for transparent decision making, Collaborative sense-making through causal reasoning; Interactive visual tool for balancing visual biases in video streams.

### Graduate Teaching Assistant

Fall 2018 – Spring 2019

Stony Brook University

Courses: Data Structure; Probability and Statistics; Machine Learning (Undergraduate).

### Lecturer

Jan 2017 – July 2018

Eastern University, Bangladesh

Courses: Introduction to Programming; Advanced Programming Lab; Data Structure.

### Software Engineer

Aug 2016 – Dec 2016

Enosis Solutions, Bangladesh

Project: Health analytics platform to visualize personalized health data. I worked on the frontend team, which was responsible for building the frontend of the platform using AngularJS and google charts.

## AWARDS

Chairman's Fellowship (Fall 2018 – Spring 2019), Stony Brook University.

Organizing Excellence, 2017, Eastern University, Bangladesh.