## THE SCHOOL OF COMPUTING AND INFORMATICS

at

the University of Louisiana at Lafayette
Lafayette, Louisiana
Announces a speaker

Dr. Enamul Hoque Prince

of

Postdoctoral Fellow HCI Group Stanford University

will give a presentation entitled

## **Visual Text Analytics for Exploring and Understanding Large Datasets**

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## **Abstract**

The inception of the World Wide Web, the rise of social media, and the recent emergence of big data have led to rapidly growing information spaces. We can consider this phenomenon as a double-edged sword: while the abundance of data opens up a great opportunity for significant discoveries, the information overload problem poses critical challenges, for both understanding and presentation.

In this talk, I will describe how we can address the challenges of information overload problem using an interdisciplinary lens, combining data visualization and human-computer interaction with natural language processing. I will first present the user-centered design and evaluation of a set of visual analytics tools for exploring and understanding online conversations (such as blogs) by combining topic modeling and sentiment analysis with visualization techniques. I will then present a topic modeling framework that empowers users in revising the underlying topic models through an intuitive set of interactive features when the current models are noisy or insufficient to support their information seeking tasks. I will then discuss how natural language can be used as an input modality to facilitate interaction with visual analytics and describe the user studies that illustrate the potential benefits of such interaction techniques for improving the flow of visual data analysis. I will conclude by discussing some ongoing work on supporting complex information seeking tasks on a huge corpus of visualizations, as well as my long-term vision of building visual analytics systems that can scale up for big data and adapt to different user characteristics.

DATE: MONDAY, JANUARY 29, 2018 TIME: 11:00 A.M. - 12:00 NOON LOCATION: OLVR, ROOM 112

## **Biography**

Enamul Hoque Prince is a postdoctoral fellow in the HCI group at Stanford University. His research addresses the challenges of the information overload problem using an interdisciplinary lens, combining data visualization and human-computer interaction with natural language processing. More specifically, he focuses on devising novel visual analytics techniques to explore large datasets such as online conversations as well as understanding the utility and potential trade-offs of such techniques from the real user's perspectives. His research also examines how different user characteristics, such as visualization expertise, cognitive abilities, and personality traits may impact the effectiveness of visualization techniques and explores ways to adapt visualizations to these characteristics. Enamul received a Ph.D. in Computer Science from University of British Columbia, where he was advised by Giuseppe Carenini, Tamara Munzner, and Raymond T. Ng. He has conducted research on visual analytics at Tableau Software and the Qatar Computing Research Institute. His work has appeared in top journals and conferences including IEEE Transactions on Visualization and Computer Graphics, ACM Transactions on Interactive Intelligent Systems, ACM CHI Conference on Human Factors in Computing Systems, ACM Intelligent User Interfaces, EuroVis, and ACL.