



Spring 2018 Colloquium

Center for Networked Computing
Department of Computer and Information Sciences

Trustworthy Data Collection for Cyber Systems and Applications

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Abstract: Businesses, governments, and individuals depend more and more on the data security and privacy protection in cyber systems. As data collection becomes broader and easier through automated data collection, sensors, and the IoT, protecting the data is becoming more of a focus. The concept of “big data” just increases the focus. Many of the contributions to this focus is on maintaining data security and privacy in the process, storage, transmission, and decision-making. However, there can be a question, what would be the situation if low-quality, untrustworthy, meaningless, or undependable data are collected at the time of acquisition, and we apply various strong security protocols to process, store, and transmit the data and make decisions for various cyber applications. Also, what would be the situation when existing privacy-preserving protocols for communication and decision-making can be effective but to what value if the data being project are themselves suspect due to attacks on the privacy at the data gathering process. In this talk, I will highlight these situations and show how untrustworthy concerns may appear during the data collection. I will then discuss challenges and potential solutions for the trustworthy data collection.

Bio: Md Zakirul Alam Bhuiyan is currently an Assistant Professor of the Department of Computer and Information Sciences at the Fordham University, NY, USA. Earlier, he worked as a Research Assistant Professor at the Temple University. His research focuses on Dependable Cyber Physical Systems, Cyber Security, and Big Data. He has served as a lead guest editor and associate editor for IEEE TBD, ACM TCPS, INS, FGCS, IEEE IoT journal, Cluster Computing, TJCA, and so on. He has also served as a general chair, program chair, workshop chair, publicity chair, TPC member, and reviewer of international journals/conferences. Currently, he is a general chair for IEEE DASC 2018 (Greece) and DependSys 2018 (Sydney), and a program chair for IEEE SmartWorld 2018 (China), IEEE I-SPAN 2018 (China), IEEE iSCI (China), and a TPC member of IEEE INFOCOM 2018. He has received the IEEE TCSC Award for Excellence in Scalable Computing for Early Career Researchers (2016-2017) and the IEEE Outstanding Leadership Award (2016,2017) and Service Award (2017). He is a senior member of IEEE and a member of ACM.