Big Data Measurement and Analytics for Networking and Security Systems

Zubair Shafiq
Michigan State University

Abstract:
Big data has become the cornerstone of the revolution in computing systems that is transforming how network and security infrastructure, services, and applications are designed and deployed. Many conventional wisdoms on which we have based the designs of existing network and security systems are either not well understood or they are simply outdated due to the rapidly changing nature of workloads, performance metrics, and user requirements.

In this talk, I will discuss how to revisit the current practices for the design and deployment of network and security systems using a combination of empirical and theoretical methods by first measuring and characterizing the trends in real-world data and then modeling the identified trends. I will also provide several examples related to mobile and cellular networks, data center networks, content distribution networks, and online social networks.

Bio:
M. Zubair Shafiq is a final-year Ph.D. candidate at Michigan State University. He received the 2013 Fitch-Beach Outstanding Graduate Research Award by College of Engineering, Michigan State University and the best paper award from 2012 IEEE International Conference on Network Protocols. His research interests focus on big data measurement and analytics for networking and security systems.