Towards Private and Secure Big Data Provisioning: Data Privacy and Accountability in the Big Data

The advent of big data has given birth to numerous innovative life-enhancing applications, but the big data is often called as a double-edged sword due to the increased privacy and security threats. Such threats, if unaddressed, will become deadly barriers to the achievement of big opportunities and success anticipated in the big data industry because they may arise during the provisioning of big data.

In this talk, I will describe my research which addressed various privacy and security issues in the big data provisioning. More specifically, I will briefly present how user-generated photos can be protected against companies collecting them, and subsequently, I will introduce the theoretic foundation of various applied research that I am involved. Finally, I will present how to make large-scale data trading accountable against dishonest users, and the talk will be concluded with a brief sketch of my future research plans.