

Computer Science Seminar Series, 2011 National Capital Region

Secure Data Sharing in Cloud Computing

Speaker: Prof. Shucheng Yu
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Abstract

Data security is a critical issue in cloud computing. The fact that users no longer physically possess their data makes it very challenging to protect data confidentiality and secure data sharing in Cloud Computing. In this talk, we will identify the challenges pertaining to the problem of securing data sharing in cloud computing. We will present our preliminary work, an encryption-based fine-grained data access control framework, that is to tackle this challenges in cloud computing. Our solution is based on a recent cryptographic scheme -- Attribute-Based Encryption (ABE). We will address issues such as fine-grained access control policy enforcement, system scalability, user management, efficiency improvement, user accountability and etc.

Biography

Shucheng Yu is Assistant Professor in the department of Computer Science at the University of Arkansas at Little Rock. He received his Ph.D in Electrical and Computer Engineering from Worcester Polytechnic Institute, a MS in Computer Science from Tsinghua University, and a BS in Computer Science from Nanjing University of Posts&Telecommunication. His research interests include Information Security and Privacy, Wireless Network Security, and Applied Cryptography. He is a member of IEEE and IEEE computer society.