

Computer Science Seminar Series, 2011

National Capital Region

Security Challenges for the Public Cloud

Speaker: Prof. Kui Ren
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Abstract

In this talk, I will first discuss a number of pressing security challenges in Cloud Computing, including data service outsourcing security and secure computation outsourcing. Then, I will focus on data storage security in Cloud Computing. As one of the primitive services, cloud storage allows data owners to outsource their data to cloud for its appealing benefits. However, the fact that owners no longer have physical possession of the outsourced data raises big security concerns on the storage correctness. Hence, enabling secure storage auditing in the cloud environment with new approaches becomes imperative and challenging. In this talk, I will present our recent research efforts towards storage outsourcing security in cloud computing and describe both our technical approaches and security & performance evaluations.

Biography

Kui Ren is currently an Assistant Professor of Electrical and Computer Engineering Department at the Illinois Institute of Technology. He received his Bachelor's and Master's Degrees from Zhejiang University and a PhD degree from Worcester Polytechnic Institute. Kui's research expertise includes Cloud Computing & Security, Wireless Security, and Smart Grid Security. His research is supported by NSF (TC, NeTS, CSR, NeTS-Neco), DoE, AFRL, and Amazon. He is a recipient of National Science Foundation Faculty Early Career Development (CAREER) Award in 2011. Kui serves as an associate editor for IEEE Wireless Communications and IEEE Transactions on Smart Grid. Kui received the Best Paper Award from IEEE ICNP 2011. Kui serves as Associate Editor for IEEE Transactions on Smart Grid and IEEE Wireless Communications. Kui is a senior member of IEEE and a member of ACM.