**Abstract:** Service Oriented Architecture (SOA) has emerged as a popular approach for developing complex business processes. The eXtensible Access Control Markup Language (XACML) is widely used to express security policies for services and their compositions. However, the conflict resolution strategy for XACML policy compositions has to be established prior to the service composition and often fails to satisfy each participant’s needs. In this talk we present our automated policy composition framework that supports the composition of policies that are stated independently by autonomous entities. We propose a technique to compose access control policies without requiring predefined conflict resolution ordering or the existence of a global control. We represent XACML policies as defeasible logic rules to support reasoning about the correctness and the soundness of the conflict resolution methods. We support three levels of conflicts resolution strategies: 1) security policy annotation, 2) defeasible logic reasoning, and 3) use of incentives. The novelty of our work is that we provide a mechanism to enable the participants (WSs) to explicitly specify assertions in their policies indicating willingness to relax some of the requirements. Our approach combines access control policies without bias against any of the participants involved in the composition. Moreover, the resulting composite policy is flexible and can be easily adjusted to changes in any of the participants’ systems with no impacts on its structure.

**Biography:** Dr. Csilla Farkas is an Associate Professor in the Department of Computer Science and Engineering and Director of the Center for Information Assurance Engineering at the University of South Carolina. Dr. Farkas’ research interests include information security, data inference problem, financial and legal analysis of cyber crime, and security and privacy on the Semantic Web. She is a recipient of the National Science Foundation Career award. The topic of her award is “Semantic Web: Interoperation vs. Security – A New Paradigm of Confidentiality Threats.” Dr. Farkas actively participates in international scientific communities as program committee member and reviewer.