



# Trust Management

## CS 6463 Lecture 12

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# Business

- Next paper:
  - N. Li, J. Mitchell, and W. Winsborough.  
Design of a role-based trust management framework.  
*IEEE Symposium on Security and Privacy, 2002.*
    - Preliminary synopsis due March 6
- Reminders
  - Preliminary project proposal
    - Due Wednesday, March 8
  - Extended synopsis for Distributed Credential Chain Discovery due March 8

# Discuss Forward and Backward Search Algorithms

- Refer to specification in JCS paper

# Storage Type System

- Each role has two types
  - Issuer-side type
    - Issuer-traces-none
    - Issuer-traces-def
    - Issuer-traces-all
  - Subject-side type
    - Subject-traces-none
    - Subject-traces-all

# Well-typed

- Well-typed role names
  - Def 5 (p27)
- Well-typed role expressions
  - Def 6 (p27)
- Well-typed credentials
  - Def 7 (p28)

# Storage Type System

- Storage type of role name determines where credential is stored: with issuer or with subject
- Well-typing ensures credentials are stored where they can be found by tracing the credential graph

<u>Credentials</u>	<u>Attribute Name</u>	<u>Type</u>	<u>Credential Stored by</u>
EPub.studentDiscount	studentDiscount	backward-traceable	EPub
1) ↑			
StateU.student	student	forward-traceable	URegistrar
2) ↑			
URegistrar.parttimeLoad	parttimeLoad	forward-traceable	Alice
3) ↑			
Alice			