PRIVACY PRESERVING DISTRIBUTED DATA MINING: A GAME-THEORETIC APPROACH

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Summary

- Privacy Preserving Data Mining Assumptions
  - Well-behaved participants
  - Homogeneous data privacy requirements
- A Game Theoretic Modeling
  - Participants are players
  - Strategies chosen to maximize personal objectives
  - Multi-objective optimization for personalized privacy
- Illustration: Secure Sum Computation
  - Design of a more robust protocol
- Applications
  - Ranking for p2p web advertising
  - Feature selection for distributed decision tree induction