

# Research Topics of Interest

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## Knowledge Bases

1. Relationships between databases with ontologies (**moderate**)
2. Automated Ontology Construction (**difficult**)

## Decision theoretic transportation and public safety systems

3. Modeling “naked” streets and their effect on Traffic (**moderate**)
4. Modeling crowds using game theory coalitions (**challenging**)
5. Use decision theory to model driving on a one-lane Country road (**moderate**)
6. Models of Evolutionary game theory in nature (**difficult**)
7. Model a distributed, collaborative collision avoidance systems(**moderate**)
8. Nature inspired Traffic Management(**moderate**)
9. Model a building evacuation system that suggests architectural revisions (**challenging**)

## Organizations

10. Modeling rapid reorganization and control for virtual, netcentric and social networks (**difficult**)
11. Exploring tradeoffs in Networked, Organizational Structures (**difficult**)

## Politics

12. Predicting Political Party Propensity for Violence using Game theory and Attack Graphs (**difficult**)
13. Modeling Indian Political System (**moderate**)
14. Modeling variants for US presidential elections (**difficult**)
15. Modeling time and social power in dynamic social networks (**difficult**)
16. Applications of Game theoretic learning techniques (**difficult**)

## Economics

17. Modeling and engineering economic externalities (**challenging**)
18. Network Games- Modeling effects of network topology on social reasoning (**challenging**)
19. Developing Mixed initiative interaction protocols (**challenging**)
20. Automating Game theory Mechanism design (**challenging**)
21. Developing a game theoretic automated machine to machine argumentation system (**challenging**)