

Santa Fe Institute did a homework problem on modelling miner networks with the prompt:

Agents, connected to one another via a network, want to exchange information. Each agent has a choice of whether to send high or low quality information, and it takes some time to verify the quality. Model how information and trust flows on the network (with and without the possibility of collusion).

- Model, using whatever techniques you wish, the above scenario.
- Explicitly state your model and key assumptions.
- Summarize key results.
- Suggest some potentially interesting future directions and questions for the model.
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- Summarize key results.
- Suggest some potentially interesting future directions and questions for the model.
- Suggest some standard social science scenarios that could be usefully modeled using such a process.

Here are the students' answers:

- [Trust and Suitable Partners](#)
- [Investigating the evolution of trust across a network utilising agent-based modelling](#)
- [Erdős-Rényi random networks](#)
- [Trust Degradation in a Simple Model of Prisoner's Dilemma among Reciprocating Agents on a Network](#)
- [Self-interest, trust, and cooperation](#)

Any comments below do discuss.