Project Summary

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My project will be attempting to model a General Systems Problem Solver (Klir, 1985) for a to-be-determined class of systems problems using a systems-inquiry-discovery method. The systems-inquiry-discovery method starts with a base layer of data, questions about that data, and a pre-existing metasystem for solving certain types of problems. The method then allows one to build up a specific system from the data based on the general metasystem; the specific system will analyze the data and attempt to answer the questions posed.

The systems-inquiry-discovery method will be simulated via cascade simulation, which allows a user to observe the dynamic progress of an agent through a connected network with some pre-specified node-to-node transfer rules. The progress of the agent will represent the gradual transformation of raw data into a finished specific system according to systems-inquiry-discovery. While it is not guaranteed that the transformation - or its representation in the cascade - will be complete for every case, even partial transformations of data into systems should yield some very interesting results about the susceptibility of a certain class of systems to the General Systems Problem Solver.