

Slime Molds

During the refractory stage, the agent does not move at all
The wave is an honest signal
Slime molds can solve the "traveling salesman" problem

Lab Task - pick one of the sliders and analyze with a parameter sweep

---Two extreme strategies

-serial (one after the other)

-parallel - ants don't care, they pick them up whenever

Find a binary metric that tells how the ants performed

Ants are likely to be serial when searching for food

If 1 ant picks up one piece of food, it's one color and that's serial if all follow - metric of 0

If 3 ants pick up from each different pile, it's parallel - metric of 1

If the output is series, all of one color will be followed by all of one color, etc.

Output = parallel, colors are equally mixed

Output is defined as ?

(when the ants pick up the food, when the ants place the food at the nest) - these are dependent on the distance

Metrics

Look at the half life of the food since beginning and end is random

Look at the heterogenous sample

Look at each food stuffs and compare the number left

-Look at number of switches-

I will be doing the evaporation metric

-Look at the evaporation, if it is low, I expect it to be serial, but if no evaporation occurs, then parallel can occur because the trails stay

Present the metric at the beginning at the next class, program it into the model

Use BehaviorSpace to setup experiments

Final project will be presented on the 5th of December

-must involve some feedback and interaction

-presentation should be 20 minutes, give a good motivation of the model (why you did it, why's it's interesting, show results, and give discussion overview at the end)

-results should look like a metric and a graph

-could also choose something that we'd done in the course, pick 1, and a new feedback to the system

-two graphs for this one at least, the one we did in class and the one that was changed

-the third option is to take a model as it is, 3 sliders evaluated in combination, and interpret them, and conclude

-must have a hypothesis/expectation on any of the choices

Post to the forum to reserve a topic. The same analysis should not be done twice.