

15-400 Project Milestone 4
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Progress/Meeting the milestones

I continued working on modeling in BioNetGen for the past 2 weeks. I finished major parts of model implementation and I am working on model fitting and more general extension of the models (with the phd student, on spatial simulation methods).

I also started the topic of formalizing a semantics of a model that gives rise to numerical “fitting/equivalence” of models. But this hasn’t gone anywhere so far. I am considering talking to prof. Jan Hoffmann after I formalize the problem itself in the context of probabilistic programming.

Milestones:

My current schedule is slightly off from my progress (0.5~1 week). I think its is still within the margin of minor fluctuation, so I will keep it as it is.

- April 5th, finish implementing the model, simulation/model fitting
- April 19th, analysis, conclusion wrt. probabilistic programs (need to keep the target programs simple enough)
- May 3rd, prepare for poster/presentation, report write up

Next 2 weeks:

Finish simulation/model fitting asap. Start working on the deliverables.

Continue on the topic of model analysis in a formal setting (but keep the focus on the former)

Resources Needed:

Using general optimizer this coming week → try MATLAB (installed, used last year, not sure if I have the access to the toolbox yet. Backup: the lab members have access to other toolkits as well)