Research Topic: What learners can expect from learning environments.

Topics: Analyzing systems where reziliant behavior is expected, analyzing systems where the output is altered by the expectation of the output over many generations, how this relates to the cognitive bias of a system, etc.

System A Receives an Agnostic Input from its environment and is given the task of interpreting this input to inform a decision made in the real world, when this system in turn has an effect on the environment system A received its input from. The objective here is to use machine learning to converge on a way of identifying its own volition across many generations and to express this as a generally useful metric called ‘slant.’

Implications of Work:

During our simulations of real world models we see that.

It is possible that if sufficient generations occur where a number of smaller factors are allowed to crop up for the big picture, or large scale causal effects, may go unnoticed by the researcher or policy maker. Looking for cognitive ‘slant’ in decision making has the potential to police the activities of learners as we integrate them more and more into our lives.

If I have a prisoner, and this prisoner has those features which cause the system to classify them as a repeat offender, the learner may choose to contain them within the system longer.

As a general incentive, we must look for cases of equilibrium

For example, if a psychiatrist may use a learner to recommend the desired dosage for a patient of their age, weight, etc. this learner has been trained on batches of data publicly available. It may advise some prisoner a to not receive parol. However, when this prisoner is released, due to their increased time spent in confinement, they are now, as the data suggests, more likely to commit a crime. This in turn, confirms the hypothesis of the machine, causing it to further train against those features.

A psychiatrist may prescribe her patient more than the normal dose because of some feature which is likely – tolerance level buildup

“Create models which are the true, real world, models for medication, etc. and add some noise for data collection error.”

Here we propose to use machine learning to train against counterfactual scenarios based upon baseline data to determine a skew coefficient. The idea is to create a general learner which is robust against enforcing those patterns which its bias creates.

The issue here has to do with training incentives when the system that determines the benefit of the outcome itself is learning and adapting.

We must take measures to ensure our learners do not make their expectations reality.

Slant may be subjectively interpreted via the application of human reason to lime results.

Write parable about machine learning, A Story About Some Prisoners, a Psychiatrist, and a Lawyer

Note also the importance of invisible machines, that is, machines must understand the effect they have on the environment.

Consider the built in incentive to drive the those mechanisms which operate around the machine towards positions of maximal predictability if predictability is considered in the metric where the desired outcome is considered and selected. This, likewise, can be considered within the context of “click through” process by which we serve ads.