Turing Essay

Jordan Taranto CS461 AI

The Turing test is to test a machine and whether or not it exhibits "intelligence" that is indistinguishable of a human. In Alan Turings study he asks a questions about math and human characteristics like the length of the "subjects" hair. To pass the Turing test the judge has 25 minutes to determine which subject is the machine. But what if the metric for success becomes the goal of the test?

After some googling and speaking with friends I was told about "Goodhart's Law" and it says "When a measure becomes a target, it ceases to be a good measure". Models today are trained on data which can have bias and given parameters to fit into, which can create unintended consequences. Here are two examples example 1: if I am training a model to fly a jet that has a human inside it and I want it to slow down it could fly it directly into the ground, it "met" its goal but in a way that is not what we want. It killed the pilot and destroyed a jet. Example 2: We want to slow the jet down and it barrels rolls extremely fast which is something that has never been done before, it succeeds but it still kills the pilot. Again both of these examples have met the goals of slowing down the jet has fast has possible.

So I don't think the Turing test is a valid measure of whether a machine truly possesses "intelligence" the example provided illustrate how meeting the defined goals does not necessarily indicate understanding, or true intelligence. In the same way a machine could 'pass' the Turing test by mimicking human responses. Intelligence is far misunderstood than simply achieving a target; it involves context, decision making, and adaptability all of yet are hard to define let alone measure. So until we can clearly define what intelligence truly entails the Turing test may not be sufficient indicators of machine intelligence.

Source:

- https://en.wikipedia.org/wiki/Goodhart%27s_law
- https://builtin.com/data-science/goodharts-law#:~:text=Goodhart's%20Law%20is%20expressed%20simply,objective%20regardless%20of%20the%20consequences.