

# Motivated AI System (MAIS)

By Laurent Weichberger, Big Data Bear (Oct. 2020)

My AI model, tentatively named “Motivated AI,” is based on a set of premises that both define a limited scope for intelligence, and a motivation to learn. There are a number of issues that will be connected in the end to create a framework, as follows:

1. Some starting intelligence definitions (this set of initial points is intentionally devoid of emotional intelligence), to get the project started, not meant to be limited (more to come):
    - a. Be able to determine between past, present and future. [Easy]
    - b. Be able to understand the difference between something alive and not alive.
      - i. This can be termed “Being” intelligence.
        1. A tree is not the same as a dead tree.
          - a. A living human is not the same as the body of a deceased human.
            - i. A dead bird is not the same as a living bird.
              1. Don’t feed the dead bird.
    - c. Be able to distinguish between different nouns (objects) in space.
      - i. This can be termed “Identity” intelligence.
        1. An apple is not a human.
          - a. Human X is not the same as human Y.
            - i. The pet cat of human X today, is not the same pet cat of human X 5 years ago.
        2. I am different than you, even though we are both human.
          - a. Two photos of a dog.
            - i. They may be the same dog.
            - ii. They may be different dogs.
    - d. Be able to learn.
      - i. Inability to learn is a failure of intelligence.
        1. Learning must be carefully defined.
    - e. Be able to distinguish distance between objects.
    - f. Be aware of incoming communication from an object.
    - g. Be able to communicate (outgoing) to an object.
    - h. Be able to understand what objects can and cannot (do, or provide).
    - i. Be able to place a relative value on an object.
    - j. Be able to distinguish between something being true or false, or uncertain.
    - k. Be able to understand quantity.
    - l. Be able to understand quality.
    - m. Be able to be told what to do and to do it.
    - n. Be able to tell an object what to do, and see if it was in fact done.
    - o. To take independent action based on an understanding of past expressed need, current need, or perceived future need. [Difficult]
2. Game of “Go” flips between (true | maybe | false) and the maybe gate.

- a. In this model, any understanding is labeled with a veracity, of true, false, or maybe.
- b. Any true can become maybe.
  - i. True can be a single true, as in belief.
  - ii. True can be multiple true, as in strong belief.
  - iii. True can be validated true, as in validated by another source (other than the original source)
  - iv. True can be contradicted and become maybe.
- c. Any maybe can become false.
  - i. Same idea as above.
- d. Any maybe can become true.
  - i. Same as above.
- e. Any false can become maybe.
  - i. Same as above.
- f. There is no way to go from true to false without passing through maybe.
  - i. This brings up the Go model.
    - 1. When enough white are surrounded by black, the white all become black.
    - 2. When enough black are surrounded by white, they all become white.
    - 3. The maybe is the game.
- g. This brings up the need for a maybe gate.
  - i. This maybe gate will ask the model to refresh its understanding.
  - ii. If there is a situation where the false is surrounded by true, it may need to flip the value that is false, to maybe, and then true.
    - 1. For example.
      - a. The question, "Are X and Y friends?" (this will be treated later in full).
        - i. X and Y share many common interests.
        - ii. Define interest carefully
        - iii. X and Y went to the same school, at the same time.
        - iv. X and Y are in the same photos.
        - v. X and Y have communicated with each other, in positive ways.
        - vi. X and Y have used the word friend in their communication.
        - vii. X and Y seem to be fond of one another.
        - viii. X and Y cannot currently communicate, as Y is dead.
          - 1. Are X and Y friends?: No, it is not possible.
          - 2. Were they friends: it seems to be so.
          - 3. Can they be friends in the future:
            - a. It depends on what you believe.
              - i. Ghosts?

- ii. Reincarnation?
- iii. Other.

3. Identity problem (and solution):

- a. The problem of artificial intelligence in general and machine learning models is that they are not “motivated” beyond an extremely specific set of goals. This doesn’t breed real AI, but a sort of pseudo problem solving AI, where you get the result desired for a specific use case.
  - i. This is fine, but not really AI.
    - 1. For example a SVM model will give you a classification of input data, but that is not generally intelligent.
  - ii. This model of motivated AI is generally intelligent.

4. Question and answer framework:

- a. The motivation behind this model is an identity problem, and presumed ability to solve:
  - i. The seed question for the model to answer is, “Who am I?”
    - 1. This implies at least these existing forms of intelligence are present (some mentioned previously).
      - a. Identity understanding.
      - b. Being understanding.
      - c. Self knowledge, as distinct from knowing others.
      - d. Ability to understand the difference between a question and its answer.
      - e. Ability to answer a question.
      - f. Ability to pose fresh questions to arrive at a state closer to the desired answer.

5. Graph of mind map (based on what I see):

- a. When I introspect as a developer of this model, I see my own mind and its process.
  - i. I associate things with other things.
    - 1. I associate objects with other objects.
    - 2. I associate actions with other actions.
    - 3. I associate objects with actions.
    - 4. I associate actions with objects.
    - 5. I then experience my senses as playing a role in the association of the above.
      - a. My mind maps my sensual experience to all of the above and more.
      - b. Since we are removing “feelings” from this model, I can’t include that here.
      - c. I can include these senses:

- i. What I see:

1. A computer can “see” as much as we allow, based on image work, and peripherals. So this is relevant to the model.
    - ii. What I “touch”:
      1. For now we can remove this from the model, but at some point if this evolves to a robotic state, there are sensors for touch.
    - iii. What I hear:
      1. We can say that hearing is text and audio input, so this is relevant.
    - iv. What I smell:
      1. We can remove this from the model for now, until a robotic smell sensor is involved. This may be useful, such as, “I smell smoke.”
    - v. What I taste.
      1. This can be removed from the model.
  - b. Over time, as the model matures, and learns, it needs to be able to identify “patterns.”
    - i. Patterns of objects.
    - ii. Patterns in behavior.
    - iii. Patterns of data.
6. Answer the question posed by Viren (“Are X & Y friends?”).
  - a. When I was asked by Viren at RoundGlass if my model can determine if X & Y are friends I laughed out loud. This is quite a complex question.
    - i. I said, “Well, we have to define friendship!”
      1. For someone a friend may be a cup of coffee once a week, and chit chat about nothing in particular.
      2. For another it may be a person on-line they have never met physically.
      3. For another it may be someone they can “trust.”
      4. Who defines friendship?
        - a. Can a human being tell if X & Y are friends?
        - b. Do X & Y even know if they are friends?
      5. Is there a pattern which can be said to indicate friendship?
        - a. Quantity (frequency) of contact.
          - i. A prison guard may check on an inmate 3 times a day, does that mean they are “friends”?
        - b. Quality of contact:
          - i. Kindness.
          - ii. Helpfulness.
          - iii. Appreciation.
          - iv. Communication.
  6. At best the model can say, “I believe they are friends, based on...” and give some understanding of the friendship perceived, maybe

a score, or whatever probability. Can the model “know” I doubt it. Even if two people express their friendship, how deeply can that expression be trusted?

7. I personally have had friends “betray” me.
  - a. Were they really my “friend”?
7. End state can be reached when the “game is over.”
  - a. To me this motivated AI model will be “done” and game over when it arrives as self-knowledge of its own identity.
    - i. This may of course never happen.
      1. We would have to plant alongside the seed question, a seed answer which if never arrived at would keep the “game” of identity going.
8. Log of associations process in real time.
  - a. In order for this model to share, or expose, its process we can provide a real time log of associations.
    - i. This would be similar to what Google has where all Google searches are visible on company UI (I saw this once in a documentary film about Google).
    - ii. We could then see how this model is “learning” through associations.
    - iii. How it is phrasing questions.
    - iv. How it is answering.
    - v. How it is mapping its own “mind.”

Endnotes:

1. “The knowledge of the software should be directly connected to the level of physical freedom that it has.” - Cyprus Weichberger.

For more information:

Laurent Weichberger  
Big Data Bear, LLC  
ompoint (at) gmail (dot) com