

Machine Intelligence Prize Entry Guidelines

The prize is to be awarded for a working system that is considered to be the most significant step forward towards Machine Intelligence on display at the competition. In turn, the systems on display at the competition will have been selected by experienced organisers to be the best of the entries submitted that year.

Machine Intelligence has an open definition that reflects a general acceptance that science is still not sure what it will be or how to measure it. This competition does not intend to constrain those working in this exciting area by narrowing a definition and constraining entry requirements. Constraints will only be applied relatively, in the first instance by the organisers of the competition and then by the voters following demonstration of systems that excludes explanation of technological or scientific complexity.

Machine Intelligence may ultimately be something that is quite different from Human Intelligence. Indeed, given the very significant differences between machines and people, this is likely to be the case. However, scientific work on Machine Intelligence that models and aims to understand human intelligence is likely to also lead to a significant step forward in the development of Machine Intelligence. This means that entries for the competition could vary greatly in the things they are intended to achieve.

Those submitting entries should however think carefully about how their entry does show progress in this area. Given the current state of working MI systems (not theoretical systems), entries may not be highly sophisticated at the current time and would be entrants should not be put off if they feel that their entry is not technologically sophisticated.

Rather than attempt to consider what would represent MI, it is perhaps easier to consider what would not be progress towards MI. The following statements may help.

- If a system continues to make the same mistake over and over again, it does not learn anything, then this may not be considered to be very intelligent.
- If the system is successful in a very simple, well-defined and low dimensional problem area then this may not demand much Machine Intelligence.

It is worth at least attempting to consider what could mean progress towards MI. However, these suggestions should be taken as guidelines and ideas but not as an inclusive list.

- Systems that do things that have not been explicitly programmed may lead to progress in MI.
- Systems that function successfully in complex and/or unpredictable environments may lead to progress in MI.

This competition concerns Progress Towards Machine Intelligence and is therefore not aiming to suppress new ideas and innovation. It is the intention of the organisers to remain open minded yet try to ensure that the competition and prize helps to encourage real progress to be made.