In Response to IEEE Request for Input on; Ethically Aligned Design: A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems (A/IS)

This response is not to any specific section but regarding the Fundamental A.I. Ethics Foundation:
To fully address A.I. Ethics the foundation upon which A.I. is built upon needs a fundamental ethics correction.

To use an analogy, where is the painter ability to paint a rainbow if they are allowed only two of the three primary colors? Likewise, how well can an end user benefit from only having access to two of the three primary user interfaces?

The usefulness of a computer is based on how well it can automate and be used to automate!

The two standard user interfaces commonly available are the command line type of interface and the Graphical User Interface type. The third, but missing, standard user interface is the Applications, Libraries, and Devices side door port. The user oriented, easy to use Inter-Process Communication port.

As the end-user has access to all the functionality the programmers allow the user via the two primary interfaces, there is no reason to not also allow the user access to all this same functionality in a manner that allows the user to automate not only within an application but across applications, even allowing direct access to the functionality in function libraries and devices.

Q: Why force the end-user to manually do that which they can, if they so choose, automate?
A: The way to become wealthy is to make people need you.

A Fundamental Ethics violation. Why? How many personal automation one offs will no programmer take on because there is no money in it for them or the company they work for? No one know because the concern was denied! Why should programmers need to do so when ethically the end-user should have a standard way for themselves to do so.

Why is this relevant to A.I. Ethics? To fully understand the answer requires reviewing and projecting the evolution of common computer usage had this third end-user interface been standard. Today we are projecting all sorts of ethical concerns over the future use of A.I., yet, the ethical issue upon which AI is built and sits upon is incorrect. Build a house on a bad foundation, it will fall or always have problems.

While A.I. is so often compared to and effort to be design to emulate human thought processes, the end-users have been denied to do so, to apply their thought processes via automation. What insights have been missed about the bridge between computer functionality and human thought process due to the end-user denial?

The following "Action Constants" are unavoidable in human thought processes and computers have to be instructed to use these. To prove the "unavoidable" simply try NOT using even just one. These make up the fundamental elements of Abstraction Physics [1].

0) Defining a word to mean a more complex definition (word = definition, function-name = actions to take, etc.)

1) Starting and Stopping the interfacing with abstraction definition sequences.

2) Keeping track of where you are in the progress of abstraction sequence usage (moving from one abstraction to another).

3) Defining and changing "input from" direction.

4) Defining and changing "output to" direction.

5) Getting input to process (using variables or place holders to carry values).

6) Sequentially stepping through abstraction/automation details (inherently includes optionally sending output).

7) looking up the meaning of a word or symbol (abstraction) so to determine action upon or with it.

8) Identifying an abstraction or real item value so to determine action upon it.

9) Putting constraints upon your abstraction look ups and identifications -When you look up a word in a dictionary you don't start at the beginning of the dictionary, but begin with the section that starts with the first letter then followed by the second, etc., and when you open a box with many items to stock, you identify each so to know where to put it in stock.

The Action Constants made available as a command set in a small shell, and configured in a simple logical manner to provide ultimate versatility and exception handling within the inherent constraints of the computer provide for a "Virtual Interaction Configuration."

This Virtual Interaction Configuration used as a standard means of accessing the vocabulary or dictionary set of available functionality of the various applications, libraries, and devices. This includes documentation, example usage and more. But the configuration also allows the ability of the end-user to define their own automatons within and between applications, libraries and devices. And all of this done in a common & consistent manner. Of course, given the unavoidable action constants in such a configuration enables more than automation, up to the user own imagination, but as well enables Knowledge Navigational Mapping. Not so unlike online Wikipedia style hyperlinks where links can be made to yet to be created information, but much more as automatons are possible, the creation of automated loops and cycles created by even the typical end-user.

How might software development have evolved had not this third primary user interface not been denied the end-user? It cannot be said what all would have come about in software development evolution but some things can be understood with certainty.

A higher degree of genuine software engineering as applications, function libraries and device interfaces would have had greater focus on integration capability.

A far better understanding of automation by the end-users resulting in greater adaptability and acceptability of A.I. As well the ranges of application of A.I. use would be greater today.

A.I. development most probably would have evolved in a different direction, a wider scope direction, but certainly the ethics issue so widely and wide scope being discussed today would not be what it currently is. The scope of A.I. ethics would be far better defined in terms of automation, and as such more manageable and inherently enforceable as end-users could not be so fooled with the promoted illusions given today about A.I.

Better late than never. Regardless of A.I. calculation speed today (i.e. Deep Learning), this does not dismiss the applicable viability of the unavoidable action constants, the Virtual Interaction Configuration nor Knowledge Navigational Mapping, as such A.I. is also accessible and map-able for wider scope automation. Tortoise and hare teamwork. Perhaps with human creativity and ingenuity removing the A.I. black box issue.

[1] http://AbstractionPhysics.net