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Comminsen

Comminsen (new name: Vecsyma) is a minimalist approach to the thorny AI problem of imbuing a computer with common sense: COMmon MINimalist SENse. The Comminsen engine is based on the software version of the brain of a toddler and of older children/teens. Comminsen has 2 senses (inputs) and 2 ways of affecting its digital environment (outputs). Its primary sense is a stream of printable ASCII characters and its secondary sense is a grid of vertices connected by edges: straight lines and diagonal lines.

- The number of vertices per row is odd, so is the number of vertices per column. Each vertex has 2 bytes, the primary byte determines up to 8 edges connected to that vertex, and the secondary byte masks out edges which are not allowed. For instance, every other vertex has only 4 allowable straight lines (and no diagonal lines) connecting to it, and border vertices have fewer than 8 allowable edges connecting to them.

Its primary output is a stream of printable ASCII characters, and its secondary output is the ability to toggle bits in the primary bytes in its grid of vertices. Both character streams have a state (on or off). The input state when activated indicates that the human/digital teachers are talking to Comminsen; the output state when activated indicates that Comminsen is talking back to them.

Comminsen is based on neural networks such as machine learning or a software version of the human brain, which can be encoded in software as more and more knowledge is accumulated about how the brain works. The English language and its grammar is not hard-coded into Comminsen, rather it learns what various words mean and how to form sentences automatically, just like a toddler. If you are interested in how the brain works, I recommend reading On Intelligence by Jeff Hawkins. The concepts he explores just might be suitable candidates for the very foundation of Comminsen and how it makes sense of the world.

If Comminsen is successful, it can eventually become the foundation of a system which has common sense just like a human, by feeding it knowledge about the world inhabited by humans. That knowledge requires machine vision and speech recognition, not just character streams and a grid of vertices and edges.