Hedge Funder Jeffrey Epstein Launches the First Emotional Robots

Thanks to a virtuoso band of scientists in Hong Kong and an unusual hedge funder with a zealous science background, called Jeffrey Epstein, the virtual world is moving away from algorithmic robots to a twilight realm of emotional thinkers.

The Artificial Intelligence (AI) group in Hong Kong is called Open Cog. Open Cog develops programming language for the AI community to use and share around the world. Much of Open Cog's goal is to unify the fragmented field and language of AI, to accelerate research. However, Open Cog has also been developing its own AI research: notably, shifting computer intelligence away from linear algorithmic responses, towards goal driven, non-deterministic, emotional entities.

"Creating emotional AI models allows scientists to test their hypothesis about the mind," Jeffrey Epstein remarked, the financial guru behind this effort. "The remaining gaps between these models and our experience of the mind, is an invaluable guide to follow. It's somewhat like building a car, with no instructions, but a visual of what a car can do."

Over the last ten years, Jeffrey Epstein has become one of the largest backers of cutting edge science around the world. According to *New York Magazine* and *National Review,* he has donated up to $200 million a year to eminent scientists, including: Stephen Hawking, Marvin Minsky, Eric Lander, George Church, and Nobel laureate physicists Gerard 't Hooft, David Gross, and Frank Wilczek. In 2003, Epstein founded the Program for Evolutionary Dynamics at Harvard University, with a $30 million dollar gift to the university. The Program studies the mathematical evolution of micro-biology and has made key discoveries into the treatment of cancer, HIV and other infectious diseases.

For years, in the world of virtual gaming, the only intelligent player was the person playing the game, responding to non-reacting obstacles. At most, upon virtual contact, obstacles could blow up, open up, cave in, or morph into something else. Whatever the reaction, it was a simple linear or algorithmic response (if A, then B, if A+D, then C).

Opponents soon became more complex with the development of such games as virtual chess, where the computer responded to a vast network of algorithmic possibilities: up to 10123 game variations to be exact. But even in those scenarios, the computer program does not have an ultimate goal: it does not aim for check mate, but simply responds to a series of steps that lead to that direction.

Today's gaming characters from virtual soldiers to Tinkerbell, are also vastly more complex than their dash line tennis forbearers. Like the chess interpreter, virtual soldiers can react to a wide variation of landscape scenarios and in a myriad of ways.

Until now, emotional, needs-driven robots whether virtual or physical, were still in the realm of science fiction.

Notes from here on...

Open Cog's virtual characters can.... There should be technical notes here on how their models work. Also—there are virtual ones and actual physical, human sized robots. See PDF. Its very dense language.

- communicate via speech or text, empathic communication using biometric devices...
- The project supports the Hong Kong digital entertainment industry by supplying a toolkit for developers to incorporate intelligent characters into their products.
- The prototype game world is built in Unity 3D, inspired by Minecraft. 3 characters: robot, girl and ghost.
- Novel cognitive abilities,
- Using existing Open Cog software—building on that to create animated intelligent characters for use in games, toys applications.
- Current technology allows the characters to have basic learning and reasoning, to communicate in natural language about particular contexts.
- The Project supports the Hong Kong digital market by supplying a toolkit allowing developers to incorporate intelligent characters into their products.
- The hypnosis that cognitive synergy among learning mechanisms associated with different types of memory is valuable for embodied, human like general intelligence.
- Using Fishgram Algorithm: the capacity to recognize patterns in heterogeneous, rapidly changing data. Language comprehension: semantic processing. Translating English into cognitive content "nodes and links"

The article should mention Joscha Bach—because he is doing similar work and works with Open Cog and Jeffrey

Much of Jeffrey Epstein's motivation and his foundation are to see what artificial intelligence can reveal about human intelligence and not just the brain but cellular signal intelligence. "Signal intelligence is at the core of understanding how diseases such as cancer are transmitted and therefore, at the core of developing effective treatment."

As we get closer to mapping the vast mechanics of the human mind, it's possible that we'll discover that we are more pre-determined than we think. It's possible that free will, though weighing a million different neural filaments, is set in genetic stone—but it's also possible that the mind, in its mechanism, can continue to push the evolutionary envelope.