Professor ponders if computers can fall in love

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Could computers fall in love? That's the question posed recently by Dr. Keith Miller, professor of computer science at the University of Illinois at Springfield.

According to Miller, the Greek definition of romantic, or "eros," love is limited to humans. There are also two other kinds of love, according to the Greeks: "philia," a love of friendship with fondness, appreciation, and loyalty. Then there is "agape" love, which is divine, unconditional and doesn't require reciprocity.

Is this in the realm of computer behavior? We'll let you decide. But consider this: Miller's scenario involves two neural net computers. Neural nets are computers that can take a program, run it in a variety of ways and "learn" what works best. A neural net computer took a robot "insect" and told it to move from where it was to the edge of the table, several feet away.

In an astonishingly short period of time, the robot "learned to walk." It looked like the fast forward of an infant from the pulling-up stage to the walking stage - from very wobbly, almost toppling over, to a pretty smooth, coordinated gait.

Here's something computers could be expected to do someday. "Imagine a dietary help system installed in a smart refrigerator," Miller says. "The system includes an artificial agent to learn your preferences and order food. The neural net learns the effects of junk food and orders healthier choices to help you, even though that wasn't the programmer's intent."

It kind of sounds like the purpose of this presentation, Miller calls this "affectionate behavior." Imagine a collection of neural net computers negotiating energy prices over the Internet," Miller says. "There could be hundreds or more computers programmed to search for energy. Miller takes it a step further. "Two of the computers with independent data sources rely on the data integrity of each other. The neural net learns the effects of junk food and orders healthier choices to help you, even though that wasn't the programmer's intent."

In the questions that followed, someone asked another "emotion," the frightening scenarios of the '90s where computers turned evil.

Miller's answer: "Hmmm, this was to be a Valentine's Day talk. If it had been a Halloween presentation, well ..."

To see a more of Miller's talk on the amazing things computers can do, check out the online link at http://people.uiu.edu/kmill2/ComputerLove/player.html.