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Kurzweilfest to bring a wild future to RIT

Featured speaker envisions future where man, machine merge

By NATE DOUGHERTY

A little more than 10 years from now, nanobots injected into the human blood stream will be able to perform brainscans on live patients and feed blood cells. Twenty years from now, human intelligence will be downloaded and stored on a computer.

Less than one week from now, students in one class at Rochester Institute of Technology will have lunch with the futurist, Raymond Kurzweil, who makes these predictions. He will serve as the initial speaker for the school's Caroline Werner Gannett Project, which brings speakers to campus to explore the "intersections of the humanities with the social sciences, sciences and technology to determine how they might relate more closely to each other in the future."

A six-credit course based on the series allows students to read the works of the presenters and interview them in intimate settings. Kurzweil will meet them for lunch in a seminar room overlooking campus.

On Monday, in anticipation of his visit, RIT will hold a panel discussion on his accomplishments titled Kurzweilfest. A collection of speakers, including Henry Kautz, professor at the University of Rochester; Gary Skuse, RIT director of bioinformatics; and David Lincoln, president of Novipella Inc., will offer students a primer on Kurzweil's accomplishments from assistive technologies to his ideas on radical life extension.

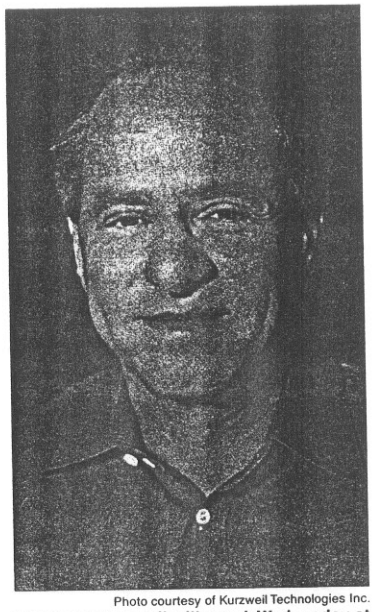

Photo courtesy of Kurzweil Technologies Inc.
Raymond Kurzweil will speak Wednesday at RIT's Gordon Field House.

After majoring in computer science and literature at Massachusetts Institute of Technology, Kurzweil formed a company to explore pattern recognition technology and invented the Kurzweil Reading Machine, which transformed print into computer spoken words for the first time. That work earned entry into the National Inventors Hall of Fame in 2002.

Kurzweil has become an expert on accelerating intelligence, the idea technological advancements will begin to multiply at exponential rates in the coming decades. In his book "The Singularity is Near," Kurzweil predicts soon technology will allow humans to overcome the body's natural limitations.

"In this new world, there will be no clear distinction between human and machine, real reality and virtual reality," a description from the book's Web site reads. "We will be able to assume different bodies and take on a range of personae at will. In practical terms, human aging and illness will be reversed; pollution will be stopped; world hunger and poverty will be solved. Nanotechnology will ... ultimately turn even death into a soluble problem."

Kurzweil predicts technology will allow humans to overcome the body's natural limitations.

The idea that technology will grow exponentially rather than linearly is difficult for many scientists to grasp, Kurzweil said. When a project to map the entire human genome began in the late 1980s with one-ten-thousandth of the genome mapped, many claimed it would be impossible to finish by 2000. When only 1 percent was finished years later, scientists remained skeptical, but the amount mapped continued to double each year and the project was finished on time.

"When we were walking through fields 1,000 years ago and saw something out of the corner of our eye coming toward us, we would use linear thinking to make a projection of how close it would be in 20 seconds," said Kurzweil, who has started 10 businesses since 1973, selling five of them. "That kind of linear thinking is hardwired in our brain."

The idea of exponential growth in IT is more easily grasped by students who have seen a level of progress once thought impossible, he said. Ten years ago the notion a device holding all of human knowledge could fit into our pocket would seem ridiculous, but cell phones and PDAs with Internet access are commonplace.

"To try to imagine how super-intelligence will change us from inside out and outside in, with nanotech in our bloodstream and the ability to upload consciousness in a computer, most people would think it's nuts," said Mary Lynn Broe, Caroline Werner Gannett professor of humanities at RIT and founder of the Gannett Project. "But most of the things he's predicted have come true."

When officials at RIT asked Kurzweil to speak at the school, he initially said no. But when school officials pressed him and told him about the school's refocus on innovation, told him that students were hungry to learn about the things he's famous for, Kurzweil relented. He even took off a portion of his speaking fee.

"He normally gets between $40,000 and $50,000 for his talks, but we got a real reduction," Broe said.

The Kurzweilfest colloquium will be held Monday in the Ingle Auditorium from 4 p.m. to 6 p.m. Kurzweil will speak Wednesday in the Gordon Field House at 7 p.m. A question-and-answer session and book signing are to follow the talk. Both are free and open to the public.

natdougherty@rbj.net / 585-546-8303