

The Emergence and Impact of Intelligent Machines

Gustave Tuck Lecture Theatre
University College London

As part of the London Symposium on Intelligent Motion and Interaction in Virtual Environments, UCL is pleased to present a public lecture by:

Raymond Kurzweil

Tuesday 16th September, 2003
17.00 - 18.00 hrs

Communication bandwidths, the shrinking size of technology, our knowledge of the human brain, and human knowledge in general are all accelerating.

Three-dimensional molecular computing will provide the hardware for human-level "strong" AI well before 2030. The more important software insights will be gained in part from the reverse-engineering of the human brain, a process well under way. Once nonbiological intelligence matches the range and subtlety of human intelligence, it will necessarily soar past it because of the continuing acceleration of information-based technologies, as well as the ability of machines to instantly share their knowledge.

Intelligent nanorobots will be deeply integrated in the environment, our bodies and our brains, providing vastly extended longevity, full-immersion virtual reality incorporating all of the senses, experience "beaming", and enhanced human intelligence. The implication will be an intimate merger between the technology-creating species and the evolutionary process it spawned.



Raymond Kurzweil is founder and chief technology officer of Kurzweil Applied Intelligence, Inc. and chairman and CEO of Kurzweil Technologies, Inc. and Kurzweil Educational Systems, Inc. He developed the first omni-font optical-character recognition system, the first print-to-speech reading machine for the blind, the first CCD flatbed image scanner, the first text-to-speech synthesizer, the first computer music keyboard capable of accurately reproducing the sounds of the grand piano and other orchestral instruments, and the first commercially marketed large-vocabulary speech-recognition system. He is the recipient of the 1994 *Dickson Prize* (Carnegie-Mellon University's top science prize), the *Grace Murray Hopper Award* from the Association for Computing Machinery and many other honors. In 1990, he was voted Engineer of the Year by the over one million readers of *Design News* magazine and received their third annual *Technology Achievement Award*. In 1988 he was named *Inventor of the Year* by MIT and the Boston Museum of Science. He was honorary chairman for innovation at the White House Conference on Small Business convened by President Reagan. A graduate of MIT, he has received nine honorary doctorates in science, engineering, music, and humane letters from leading colleges and universities. His book, *The Age of Intelligent Machines*, was chosen Most Outstanding Computer Science Book of 1990 by the Association of American Publishers, and his companion documentary film received seven national and international awards, including the *CINE Golden Eagle Award* and the *Gold Medal for Science Education* from the International Film and TV Festival of New York.

IMIVE 20003, symposium on Intelligent Motion and Interaction within Virtual Environments
Information and registration in: <http://www.cs.ucl.ac.uk/Motion/>
Attendance at this lecture will cost £30 unless registered for the full symposium.



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