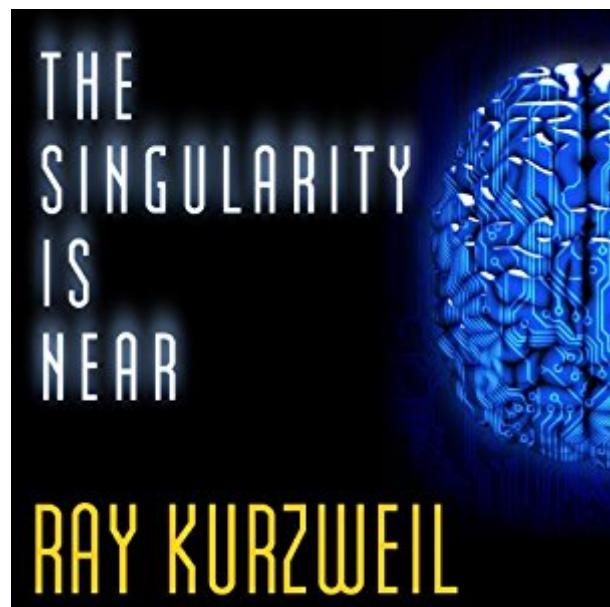


The book was found

# The Singularity Is Near: When Humans Transcend Biology



## Synopsis

For over three decades, the great inventor and futurist Ray Kurzweil has been one of the most respected and provocative advocates of the role of technology in our future. In his classic *The Age of Spiritual Machines*, he argued that computers would soon rival the full range of human intelligence at its best. Now he examines the next step in this inexorable evolutionary process: the union of human and machine, in which the knowledge and skills embedded in our brains will be combined with the vastly greater capacity, speed, and knowledge-sharing ability of our creations. That merging is the essence of the Singularity, an era in which our intelligence will become increasingly nonbiological and trillions of times more powerful than it is today - the dawning of a new civilization that will enable us to transcend our biological limitations and amplify our creativity. In this new world, there will be no clear distinction between human and machine, real reality and virtual reality. While the social and philosophical ramifications of these changes will be profound, and the threats they pose considerable, *The Singularity Is Near* maintains a radically optimistic view of the future course of human development. As such, it offers a view of the coming age that is both a dramatic culmination of centuries of technological ingenuity and a genuinely inspiring vision of our ultimate destiny.

## Book Information

Audible Audio Edition

Listening Length: 24 hours and 44 minutes

Program Type: Audiobook

Version: Unabridged

Publisher: Tantor Audio

Audible.com Release Date: May 5, 2011

Whispersync for Voice: Ready

Language: English

ASIN: B004ZF18PW

Best Sellers Rank: #4 in Books > Engineering & Transportation > Engineering > Bioengineering > Biotechnology #40 in Books > Audible Audiobooks > Science > Technology & Engineering #80 in Books > Science & Math > Evolution

## Customer Reviews

The author is definitely one of the most inspiring of all researchers in the field of applied artificial intelligence. For those, such as this reviewer, who are working "in the trenches" of applied AI, his

website is better than morning coffee. One does not have to agree with all the conclusions reached by the author in order to enjoy this book, but he does make a good case, albeit somewhat qualitative, for the occurrence, in this century, of what he and other futurists have called a 'technological singularity.' He defines this as a period in the future where the rate of technological change will be so high that human life will be 'irreversibly transformed.' There is much debate about this notion in the popular literature on AI, but in scientific and academic circles it has been greeted with mixed reviews. Such skepticism in the latter is expected and justified, for scientists and academic researchers need more quantitative justification than is usually provided by the enthusiasts of the singularity, which in this book the author calls "singularitarians." Even more interesting though is that the notion of rapid technological change seems to be ignored by the business community, who actually stand to gain (or lose) the most by it. Since this book is aimed primarily at a wide audience, and not professional researchers, the author does not include detailed arguments or definitions for the notion of machine intelligence or a list of the hundreds of examples of intelligent machines that are now working in the field. Indeed, if one were to include a discussion of each of these examples, this book would swell to thousands of pages.

Kurzweil does a good job of arguing that extrapolating trends such as Moore's Law is better than most alternative forecasting methods, and he does a good job of describing the implications of those trends. But he is a bit long-winded, and tries to hedge his methodology by pointing to specific research results which he seems to think buttress his conclusions. He neither convinces me that he is good at distinguishing hype from value when analyzing current projects, nor that doing so would help with the longer-term forecasting that constitutes the important aspect of the book. Given the title, I was slightly surprised that he predicts that AIs will become powerful slightly more gradually than I recall him suggesting previously (which is a good deal more gradual than most Singularitarians). He offsets this by predicting more dramatic changes in the 22nd century than I imagined could be extrapolated from existing trends. His discussion of the practical importance of reversible computing is clearer than anything else I've read on this subject. When he gets specific, large parts of what he says seem almost right, but there are quite a few details that are misleading enough that I want to quibble with them. For instance (talking about the world circa 2030): "The bulk of the additional energy needed is likely to come from new nanoscale solar, wind, and geothermal technologies." Yet he says little to justify this, and most of what I know suggests that wind and geothermal have little hope of satisfying more than 1 or 2 percent of new energy demand. His reference to "the devastating effect that illegal file sharing has had on the music-recording industry"

seems to say something undesirable about his perspective.

To say that Mr. Kurzweil is a bit of an optimist is like saying Shaq is a bit on the tall side. Mr K is positively bubbling with enthusiasm. Had it not been taken by Joe Namath a suitable title might have been "The Future's So Bright I Just Gotta Wear Shades". But therein lies the problem. Mr K comes across more like a passionate evangelical than a reasoned scientist. Whenever someone is absolutely convinced about the rightness of his assumptions I become skeptical. If you're reading this you know the premise of the book. Mr. K maintains that the pace of technological change (and by technology he means the really cool technologies, like infotech, biotech, and nanotech) is not simply increasing, but increasing exponentially, so fast that we will soon reach a point where man and machine have become one, and are brains are a million (or maybe a billion) times more powerful. When this happens everything we know will have changed forever. Moreover, this is not something that will happen at some vague time in the far future. It's just around the corner. Mr. K even gives us a date: 2045. While reading the book I kept thinking, What if Mr. K had written this in the mid 1950's? Certainly he'd have backup for his basic premise--the changes that occurred in the first half of the 20th century were indeed tremendous. Take aviation, a hot technology in those days. Mr. K would no doubt have observed that we went from Kitty Hawk to the Boeing 707 in just 50 years. Projecting ahead, Mr. K would have concluded that the second half of the century would see an even greater rate of advancement, so that by now we'd all have our own personal flying devices, zipping off to Europe in just minutes. But that hasn't happened.

[Download to continue reading...](#)

The Singularity Is Near: When Humans Transcend Biology How to Have an Out-of-Body Experience: Transcend the Limits of Physical Form and Accelerate Your Spiritual Evolution Understanding the Borderline Mother: Helping Her Children Transcend the Intense, Unpredictable, and Volatile Relationship The Economic Singularity: Artificial Intelligence and the Death of Capitalism The Technological Singularity (The MIT Press Essential Knowledge series) Power Laws, Scale-Free Networks and Genome Biology (Molecular Biology Intelligence Unit) CliffsNotes AP Biology, Fourth Edition (Cliffs Ap Biology) Sterling SAT Biology E/M Practice Questions: High Yield SAT Biology E/M Questions Sterling AP Biology Practice Questions: High Yield AP Biology Questions McGraw-Hill's SAT Subject Test: Biology E/M, 2/E (McGraw-Hill's SAT Biology E/M) Kaplan GRE Subject Test: Biology (Kaplan GRE Biology) 5th edition The Biology of Coral Reefs (Biology of Habitats Series) The Biology of Deserts (Biology of Habitats Series) The Biology of Freshwater Wetlands (Biology of Habitats) Handbook of Freshwater Fishery Biology, Volume 2: Life

History Data on centrarchid Fishes of the United States and Canada (Handbook of Freshwater Fishery Biology) Biology and Ecology of Earthworms (Biology & Ecology of Earthworms) McGraw-Hill's SAT Subject Test Biology E/M, 3rd Edition (McGraw-Hill's SAT Biology E/M) Kaplan GRE Exam Subject Test: Biology 2009-2010 Edition (Kaplan Gre Biology) Sterling DAT Biology Practice Questions: High Yield DAT Biology Questions Sterling CLEP Biology Practice Questions: High Yield CLEP Biology Questions

[Dmca](#)