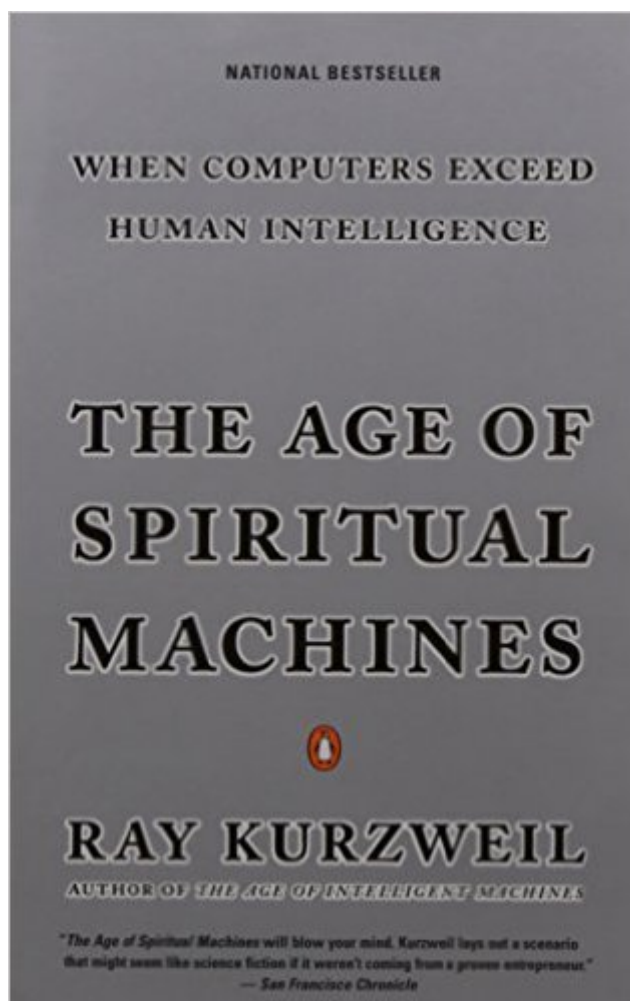# The Age Of Spiritual Machines: When Computers Exceed Human Intelligence

Synopsis

Ray Kurzweil is the inventor of the most innovative and compelling technology of our era, an international authority on artificial intelligence, and one of our greatest living visionaries. Now he offers a framework for envisioning the twenty-first century--an age in which the marriage of human sensitivity and artificial intelligence fundamentally alters and improves the way we live. Kurzweil's prophetic blueprint for the future takes us through the advances that inexorably result in computers exceeding the memory capacity and computational ability of the human brain by the year 2020 (with human-level capabilities not far behind); in relationships with automated personalities who will be our teachers, companions, and lovers; and in information fed straight into our brains along direct neural pathways. Optimistic and challenging, thought-provoking and engaging, The Age of Spiritual Machines is the ultimate guide on our road into the next century.

Book Information

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Customer Reviews

Ray Kurzweil's "The Age of Spiritual Machines' is an intelligent look at what the future might be holding for us all. Like other similar titles - Visions by Michio Kaku comes to mind - Kurzweil tries to predict where science will take us. Unlike `Visions' however, this book is considerably more focused on computer technology and artificial intelligence, and I would only recommend it if you're not looking for a much broader answer to the question of where we are headed. Kurzweil never intended to cover other matters, and reading the Prologue will be enough to understand that most of the book will explore the rising of machine intelligence to a level that will surpass the capabilities of

the human brain.Kurzweil starts by describing the exponential growth of computer power, Moore's Law, and transistor-based computing. The present and the future are described until quantum effects start becoming a problem and a completely new kind of technology becomes necessary (some alternatives are mentioned, Quantum computation is of course, mentioned). The book proceeds to more metaphysical subjects, and questions if we can create another intelligence form more intelligent than ourselves. Can the created exceed the creator?It will then proceed to cover consciousness and feelings; Kurzweil gets philosophical in what in my opinion is one of the book's weakest chapters The methods available to solve a wide range of intelligent problems (when combined with heavy doses of computation) will follow, in a chapter that covers subjects from recursive formulas to neural nets, and of course, enough space is dedicated to Alan Turing, the father of all modern computers.

I read an excerpt from this outstanding book in the magazine Scientific American about a year ago, causing me immediate future shock, now exacerbated and expanded upon reading the entire book.If you read the last chapters first it would be easy to conclude that Mr. Kurzweil is crazy. However, we have here an obviously highly educated computer scientist, successful business person, and superb writer, who also apparently has spent significant time and personal engergy considering the implications of our present science. Given the attributes and qualifications of this author, the substantive content of the book then becomes extremely difficult to ignore or dismiss, and I certainly wonder when the implications here presented will begin to create the expected anxiety among our general population.Mr. Kurzweil carefully sets the stage for his various futurist predictions. He presents a most interesting history of computer science; an intro to the law of "chaos" theory, and a rendition of the theory of evolution intelligent enough to permanently stifle any creationist; a comprehensive, informative explanation of both machine and human intelligence, which upon reading, I finally understand the mental machinations of my animals and of myself--call it "consciousness explained", and we are made aware of its scientific limits and possibilities. And, for those who have any question at all that machine intelligence equivalent to human intelligence is possible, Mr. Kurzweil breaks it down into both understandable and frightening reality.

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