Artificial Intelligence: A Philosophical Introduction
Synopsis

Presupposing no familiarity with the technical concepts of either philosophy or computing, this clear introduction reviews the progress made in AI since the inception of the field in 1956. Copeland goes on to analyze what those working in AI must achieve before they can claim to have built a thinking machine and appraises their prospects of succeeding. There are clear introductions to connectionism and to the language of thought hypothesis which weave together material from philosophy, artificial intelligence and neuroscience. John Searle's attacks on AI and cognitive science are countered and close attention is given to foundational issues, including the nature of computation, Turing Machines, the Church-Turing Thesis and the difference between classical symbol processing and parallel distributed processing. The book also explores the possibility of machines having free will and consciousness and concludes with a discussion of in what sense the human brain may be a computer.

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Customer Reviews

"An excellent job ... the most balanced treatment of the hopes and claims of AI I have yet seen."
Hubert Dreyfus, University of California "The best philosophical introduction to artificial intelligence available." Justin Leiber, University of Houston
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human brain may be a computer.

What a complete and total mindfuck

I read this book not long after it was first published. It is a fantastic book and Copeland is great at
explaining the issues. As one reviewer noted, at this point in time the "computing" parts of the book
are dated. I wish Professor Copeland would issue a second edition of this book. In fact, during the
last twenty years or so I have checked back every few years in the hopes that he had but so far no
luck.

This is a fascinating and lively book, which is almost incredible give that it is an introductory
philosophy textbook. Copeland manages to write with both personality and balance. The
combination of his style (which is clear and witty without being facetious) and the intrinsic interest of
the subject of artificial intelligence had me hooked. I read it like a novel, never wanting to put it
down. Copeland assumes no prior knowledge of computer science, psychology, or philosophy, so
the book should be accessible to any intelligent reader, although a few parts can be hard going.
Beginners are likely to struggle with the sections on the CYC project (in chapter 5) and the
Church-Turing thesis (in chapter 10), but slow and careful reading should do the trick. Copeland
does explain everything you need to know in order to understand what he’s saying, but some of his
explanations are gentler than others. Otherwise my only complaint is that Copeland raises some
interesting questions without exploring them very far. His view on the prospect for artificial
intelligence is that, given the purposes for which we use such concepts as thinking, it is quite
possible that there will come a day when the only reasonable course is to say that machines can
think. In other words, he thinks that computers cannot now think, but that one day they (or their
descendants) might become sophisticated enough that we ought to change our use of the word
'think' so that it applies to machines as well as humans. But he says very little about the purposes of concepts like thinking. In particular, he ignores the idea that rationality (surely a related concept) has great moral significance of a kind that might well make some people highly reluctant to say of any machine that it really thinks. Since this is an introductory book I don’t hold this against Copeland, but it would be nice if he would say something about this in the next edition, which I believe is due out soon. I'm looking forward to it.

I had high hopes for this book as part of my Artificial Intelligence course. I’ve been unhappy with the edited volumes where I would find a small subset of papers that I wanted to use in a course. Copeland’s treatment of the intersection between Philosophy of Mind and Artificial Intelligence seemed to be exactly what I was looking for in a text. Unfortunately, the AI content is extremely dated, making it nearly useless to my computer science majors. (If I were teaching in a Philosophy department that wouldn't matter as much.) The first half of the book is great as a historical perspective, but I’ll be going back to the edited volumes next time I teach AI and want to cover the Philosophy of Mind questions.