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Sommario/riassunto

"In this book, focusing on robot arm control aided with neural networks, we present and investigate different methods and schemes for the control of robot arms. The idea for this book on the redundancy resolution of robot manipulators via different methods and schemes was conceived during the research discussion in the laboratory and at international scientific meetings. Most of the materials of this book are derived from the authors' papers published in journals and proceedings of the international conferences. In fact, in recent decades, the field of robotics has undergone the phases of exponential growth, generating many new theoretical concepts and applications. Our first priority is thus to cover each central topic in enough details to make the material clear and coherent; in other words, each part (and even each chapter) is written in a relatively self-contained manner"--