

Preface

Morals are based on the knowledge of universal ideas, and so they have a universal character.

Plato

Relativity applies to physics, not to ethics.

Albert Einstein

The aim of this book is to provide a navigating introductory overview of the fundamental concepts, principles and problems in the field of *roboethics* (robot ethics). Roboethics is a branch of applied ethics that attempts to illuminate how the ethical principles can be applied to address the delicate and critical ethical questions arising in using robots in our society. Ethics has its origin in ancient philosophy that has put the analytic foundations on determining what is *right* and *wrong*. The Greek philosophers advocated models of life with the *human* as their central value (“*valeur par excellence*”).

Robotics has been developed along these lines, i.e., robotics in the *service of mankind*. Robotics is directly connected to human life; medical robotics, assistive robotics, service-socialized robotics and military robotics all have strong impact on human life and pose major ethical problems for our society. Roboethics is receiving increasing attention within the fields of *techno-ethics* and *machine ethics*, and a rich literature is available that covers the entire spectrum of issues from theory to practice.

The depth and width of the presentation in this book is sufficient for the reader to understand the ethical concerns of designers and users of intelligent and autonomous robots, and the ways conflicts and dilemmas might be resolved. The book is of a tutorial nature, convenient for novices in the field, and includes some conceptual non-technical material of artificial/machine intelligence, the robot world with emphasis on the types and applications of robots, and mental robots that possess, besides cognition, intelligence and autonomy capabilities, consciousness and conscience features.

The book can be used both as a supplement in robotics courses and as a general information source. Those who are planning to study roboethics in-depth will find this book a convenient consolidated start.

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Roboethics

A Navigating Overview

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