MACHINES
AND
MORALITY:
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Morality And Machines

Wendell Wallach,Peter Asaro

Morality And Machines:

Moral Machines Wendell Wallach,Colin Allen,2010-07-15 Moral Machines is a fine introduction to the emerging field of robot ethics There is much here that will interest ethicists philosophers cognitive scientists and roboticists Peter Danielson Notre Dame Philosophical Reviews   Machine Ethics Luís Moniz Pereira,António Barata Lopes,2020-01-22 This book offers the first systematic guide to machine ethics bridging between computer science social sciences and philosophy Based on a dialogue between an AI scientist and a novelist philosopher the book discusses important findings on which moral values machines can be taught and how In turn it investigates what kind of artificial intelligence AI people do actually want What are the main consequences of the integration of AI in people s every day life In order to co exist and collaborate with humans machines need morality but which moral values should we teach them Moreover how can we implement benevolent AI These are just some of the questions carefully examined in the book which offers a comprehensive account of ethical issues concerning AI on the one hand and a timely snapshot of the power and potential benefits of this technology on the other Starting with an introduction to common sense ethical principles the book then guides the reader helping them develop and understand more complex ethical concerns and placing them in a larger technological context The book makes these topics accessible to a non expert audience while also offering alternative reading pathways to inspire more specialized readers

Morality and Machines Stacey L. Edgar,2002 Intended for science and technology students philosophy students interested in applied ethics and others who must deal with computers and the impact they have on our society   Machine Ethics Michael Anderson,Susan Leigh Anderson,2011-05-09 The new field of machine ethics is concerned with giving machines ethical principles or a procedure for discovering a way to resolve the ethical dilemmas they might encounter enabling them to function in an ethically responsible manner through their own ethical decision making Developing ethics for machines in contrast to developing ethics for human beings who use machines is by its nature an interdisciplinary endeavor The essays in this volume represent the first steps by philosophers and artificial intelligence researchers toward explaining why it is necessary to add an ethical dimension to machines that function autonomously what is required in order to add this dimension philosophical and practical challenges to the machine ethics project various approaches that could be considered in attempting to add an ethical dimension to machines work that has been done to date in implementing these approaches and visions of the future of machine ethics research   *Morality and Machines* Stacey L. Edgar,2003   *Machine Law, Ethics, and Morality in the Age of Artificial Intelligence* Thompson, Steven John,2021-03-18 Machines and computers are becoming increasingly sophisticated and self sustaining As we integrate such technologies into our daily lives questions concerning moral integrity and best practices arise A changing world requires renegotiating our current set of standards Without best practices to guide interaction and use with these complex machines interaction with them will turn disastrous Machine Law Ethics and Morality in the Age of Artificial Intelligence is a collection of innovative research that presents

holistic and transdisciplinary approaches to the field of machine ethics and morality and offers up to date and state of the art perspectives on the advancement of definitions terms policies philosophies and relevant determinants related to human machine ethics The book encompasses theory and practice sections for each topical component of important areas of human machine ethics both in existence today and prospective for the future While highlighting a broad range of topics including facial recognition health and medicine and privacy and security this book is ideally designed for ethicists philosophers scientists lawyers politicians government lawmakers researchers academicians and students It is of special interest to decision and policy makers concerned with the identification and adoption of human machine ethics initiatives leading to needed policy adoption and reform for human machine entities their technologies and their societal and legal obligations

Machines Behaving Badly Toby Walsh,2022-05-03 Artificial intelligence is an essential part of our lives for better or worse It can be used to influence what we buy who gets shortlisted for a job and even how we vote Without AI medical technology wouldn t have come so far we d still be getting lost on backroads in our GPS free cars and smartphones wouldn t be so well smart But as we continue to build more intelligent and autonomous machines what impact will this have on humanity and the planet Professor Toby Walsh a world leading researcher in the field of artificial intelligence explores the ethical considerations and unexpected consequences AI poses Is Alexa racist Can robots have rights What happens if a self driving car kills someone What limitations should we put on the use of facial recognition Machines Behaving Badly is a thought provoking look at the increasing human reliance on robotics and the decisions that need to be made now to ensure the future of AI is as a force for good not evil   **The Machine Question** David J. Gunkel,2017-09-08 An investigation into the assignment of moral responsibilities and rights to intelligent and autonomous machines of our own making One of the enduring concerns of moral philosophy is deciding who or what is deserving of ethical consideration Much recent attention has been devoted to the animal question consideration of the moral status of nonhuman animals In this book David Gunkel takes up the machine question whether and to what extent intelligent and autonomous machines of our own making can be considered to have legitimate moral responsibilities and any legitimate claim to moral consideration The machine question poses a fundamental challenge to moral thinking questioning the traditional philosophical conceptualization of technology as a tool or instrument to be used by human agents Gunkel begins by addressing the question of machine moral agency whether a machine might be considered a legitimate moral agent that could be held responsible for decisions and actions He then approaches the machine question from the other side considering whether a machine might be a moral patient due legitimate moral consideration Finally Gunkel considers some recent innovations in moral philosophy and critical theory that complicate the machine question deconstructing the binary agent patient opposition itself Technological advances may prompt us to wonder if the science fiction of computers and robots whose actions affect their human companions think of HAL in 2001 A Space Odyssey could become science fact Gunkel s argument promises to influence future considerations of ethics ourselves

and the other entities who inhabit this world   Machine Ethics and Robot Ethics Wendell Wallach,Peter Asaro,2020-09-10 Once the stuff of science fiction recent progress in artificial intelligence robotics and machine learning means that these rapidly advancing technologies are finally coming into widespread use within everyday life Such rapid development in these areas also brings with it a host of social political and legal issues as well as a rise in public concern and academic interest in the ethical challenges these new technologies pose This volume is a collection of scholarly work from leading figures in the development of both robot ethics and machine ethics it includes essays of historical significance which have become foundational for research in these two new areas of study as well as important recent articles The research articles selected focus on the control and governance of computational systems the exploration of ethical and moral theories using software and robots as laboratories or simulations inquiry into the necessary requirements for moral agency and the basis and boundaries of rights and questions of how best to design systems that are both useful and morally sound Collectively the articles ask what the practical ethical and legal issues arising from the development of robots will be over the next twenty years and how best to address these future considerations   **Machine Medical Ethics** Simon Peter van Rysewyk,Matthijs Pontier,2014-09-05 The essays in this book written by researchers from both humanities and science describe various theoretical and experimental approaches to adding medical ethics to a machine what design features are necessary in order to achieve this philosophical and practical questions concerning justice rights decision making and responsibility in medical contexts and accurately modeling essential physician machine patient relationships In medical settings machines are in close proximity with human beings with patients who are in vulnerable states of health who have disabilities of various kinds with the very young or very old and with medical professionals Machines in these contexts are undertaking important medical tasks that require emotional sensitivity knowledge of medical codes human dignity and privacy As machine technology advances ethical concerns become more urgent should medical machines be programmed to follow a code of medical ethics What theory or theories should constrain medical machine conduct What design features are required Should machines share responsibility with humans for the ethical consequences of medical actions How ought clinical relationships involving machines to be modeled Is a capacity for empathy and emotion detection necessary What about consciousness This collection is the first book that addresses these 21st century concerns   Raising Robots to be Good Rebecca Raper,2024-11-26 In 1941 Isaac Asimov famously introduced us to the idea of Robots with the ability to tell between right and wrong However as his stories go on to show the Laws of Robotics weren t quite able to govern robots in a way that we would deem acceptable for humanity In recent years scientists have worked to try to understand how we might create robots with this capability robots with morals and as Robots and Artificial Intelligence Systems become more integrated into society and our lives it seems that achieving this aim is as pertinent as ever This book introduces this pursuit known as Machine Ethics and aims to outline some of the art and science behind the field including the philosophy psychology and computer science that

underpins much of the research into this area After the necessary background and an exploration of the problem a new theory is proposed inspired how we might envisage moral agency developing in a child The proposal is that we need to cultivate moral development in a robot in pretty much the same way we might parent a child Raising Robots to be Good

Machine Ethics and Robot Ethics Wendell Wallach,Peter Asaro,2020-09-10 Once the stuff of science fiction recent progress in artificial intelligence robotics and machine learning means that these rapidly advancing technologies are finally coming into widespread use within everyday life Such rapid development in these areas also brings with it a host of social political and legal issues as well as a rise in public concern and academic interest in the ethical challenges these new technologies pose This volume is a collection of scholarly work from leading figures in the development of both robot ethics and machine ethics it includes essays of historical significance which have become foundational for research in these two new areas of study as well as important recent articles The research articles selected focus on the control and governance of computational systems the exploration of ethical and moral theories using software and robots as laboratories or simulations inquiry into the necessary requirements for moral agency and the basis and boundaries of rights and questions of how best to design systems that are both useful and morally sound Collectively the articles ask what the practical ethical and legal issues arising from the development of robots will be over the next twenty years and how best to address these future considerations   AI Ethics Paula Boddington,2023-03-30 This book introduces readers to critical ethical concerns in the development and use of artificial intelligence Offering clear and accessible information on central concepts and debates in AI ethics it explores how related problems are now forcing us to address fundamental age old questions about human life value and meaning In addition the book shows how foundational and theoretical issues relate to concrete controversies with an emphasis on understanding how ethical questions play out in practice All topics are explored in depth with clear explanations of relevant debates in ethics and philosophy drawing on both historical and current sources Questions in AI ethics are explored in the context of related issues in technology regulation society religion and culture to help readers gain a nuanced understanding of the scope of AI ethics within broader debates and concerns Written with both students and educators in mind the book is easy to use with key terms clearly explained and numerous exercises designed to stretch and challenge It offers readers essential insights into the evolving field of AI ethics Moreover it presents a range of methods and strategies that can be used to analyse and understand ethical questions which are illustrated throughout with case studies

Culturally Sustainable Social Robotics M. Nørskov,J. Seibt,O.S. Quick,2021-01-04 The subject of social robotics has enormous projected economic significance However social robots not only present us with novel opportunities but also with novel risks that go far beyond safety issues It is a potentially highly disruptive technology which could negatively affect the most valuable parts of the fabric of human social interactions in irreparable ways Since engineering educations do not yet offer the necessary competences to analyze holistically assess and constructively mitigate these risks new alliances must be

established between engineering and SSH disciplines with special emphasis on the humanities i e disciplines specializing in the analysis of socio cultural interactions and human experience The Robophilosophy Conference Series was established in 2014 with the purpose of creating a new forum and catalyzing the research discussion in this important area of applied humanities research with focus on robophilosophy Robophilosophy conferences have been the world s largest venues for humanities research in and on social robotics The book at hand presents the proceedings of Robophilosophy Conference 2020 Culturally Sustainable Social Robotics the fourth event in the international biennial Robophilosophy Conference Series which brought together close to 400 participants from 29 countries The speakers of the conference whose contributions are collected in this volume were invited to offer concrete proposals for how the Humanities can help to shape a future where social robotics is guided by the goals of enhancing socio cultural values rather than by utility alone The book is divided into 3 parts Abstracts of Plenaries which contains 6 plenary sessions Session Papers with 44 papers under 8 thematic categories and Workshops containing 25 items on 5 selected topics Providing concrete proposals from philosophers and other SSH researchers for new models and methods this book will be of interest to all those involved in developing artificial social agents in a culturally sustainable way that is also a fortiori ethically responsible **Ethics and Technology** Herman T. Tavani,2016-01-11 Ethics and Technology 5th Edition by Herman Tavani introduces students to issues and controversies that comprise the relatively new field of cyberethics This text examines a wide range of cyberethics issues from specific issues of moral responsibility that directly affect computer and information technology IT professionals to broader social and ethical concerns that affect each of us in our day to day lives The 5th edition shows how modern day controversies created by emerging technologies can be analyzed from the perspective of standard ethical concepts and theories **Artificial Morality** Andrei Nutas,Trivent Publishing,2024-12-01 Artificial Morality An Exploration of Moral Machines is an exploration of the ethical and philosophical challenges in developing artificial intelligence systems capable of moral reasoning and behaviour Bridging centuries of philosophical debate with analyses of large language models this book examines how shifting conceptions of human identity and the evolution of technology shape our understanding of morality It critiques anthropocentric views of ethical agency while proposing innovative frameworks for aligning AI with diverse human values Through a deep dive into the technical architectures of current AI systems discussions on machine consciousness and the risks posed by autonomous systems Andrei Nutas charts a path for embedding principles like fairness privacy and accountability into future intelligent machines This study concludes by advocating for the nurturing of machine wisdom guided by universal principles that transcend rigid exceptionalism ultimately aiming to foster a more compassionate and equitable future for all sentient beings **Trolley Crash** Peggy Wu,Michael Salpukas,Hsin-Fu Wu,Shannon Ellsworth,2024-01-26 The prolific deployment of Artificial Intelligence AI across different fields has introduced novel challenges for AI developers and researchers AI is permeating decision making for the masses and its applications range

from self driving automobiles to financial loan approvals With AI making decisions that have ethical implications responsibilities are now being pushed to AI designers who may be far removed from how where and when these ethical decisions occur Trolley Crash Approaching Key Metrics for Ethical AI Practitioners Researchers and Policy Makers provides audiences with a catalogue of perspectives and methodologies from the latest research in ethical computing This work integrates philosophical and computational approaches into a unified framework for ethical reasoning in the current AI landscape specifically focusing on approaches for developing metrics Written for AI researchers ethicists computer scientists software engineers operations researchers and autonomous systems designers and developers Trolley Crash will be a welcome reference for those who wish to better understand metrics for ethical reasoning in autonomous systems and related computational applications Presents a comparison between human oversight and ethical simulation in robots Introduces approaches for measuring evaluating and auditing ethical AI Investigates how AI and technology are changing human behavior **Algorithmic Morality: The Ethics of Machine Decision-Making** Ahmad Musa,2024-12-27 In a world increasingly driven by technology the decisions made by machines are no longer just an afterthought they shape our lives our societies and our futures Algorithmic Morality The Ethics of Machine Decision Making dives deep into the complex and often controversial realm of artificial intelligence and machine learning exploring the ethical implications of algorithms that decide everything from hiring practices to judicial outcomes This thought provoking book examines the profound questions of fairness accountability and transparency that arise when machines are tasked with making decisions that impact human lives Through a mix of case studies expert insights and real world examples it probes the moral dilemmas that technology presents such as bias in algorithms the potential for unintended consequences and the limits of machine autonomy Algorithmic Morality also challenges readers to confront the broader philosophical questions surrounding the role of technology in a rapidly changing world Can machines be trusted to act ethically Who is responsible when algorithms go wrong And how can we ensure that technological progress is aligned with the values of society This book is a must read for anyone interested in understanding the intersection of ethics technology and society It is an essential resource for students professionals and anyone concerned with the future of AI and the moral compass that guides it Robot Ethics Patrick Lin,Keith Abney,George A. Bekey,2014-01-10 Prominent experts from science and the humanities explore issues in robot ethics that range from sex to war Robots today serve in many roles from entertainer to educator to executioner As robotics technology advances ethical concerns become more pressing Should robots be programmed to follow a code of ethics if this is even possible Are there risks in forming emotional bonds with robots How might society and ethics change with robotics This volume is the first book to bring together prominent scholars and experts from both science and the humanities to explore these and other questions in this emerging field Starting with an overview of the issues and relevant ethical theories the topics flow naturally from the possibility of programming robot ethics to the ethical use of military robots in war to legal and

policy questions including liability and privacy concerns The contributors then turn to human robot emotional relationships examining the ethical implications of robots as sexual partners caregivers and servants Finally they explore the possibility that robots whether biological computational hybrids or pure machines should be given rights or moral consideration Ethics is often slow to catch up with technological developments This authoritative and accessible volume fills a gap in both scholarly literature and policy discussion offering an impressive collection of expert analyses of the most crucial topics in this increasingly important field   **Ethics of Artificial Intelligence** S. Matthew Liao,2020-08-18 As Artificial Intelligence AI technologies rapidly progress questions about the ethics of AI in both the near future and the long term become more pressing than ever This volume features seventeen original essays by prominent AI scientists and philosophers and represents the state of the art thinking in this fast growing field Organized into four sections this volume explores the issues surrounding how to build ethics into machines ethical issues in specific technologies including self driving cars autonomous weapon systems surveillance algorithms and sex robots the long term risks of superintelligence and whether AI systems can be conscious or have rights Though the use and practical applications of AI are growing exponentially discussion of its ethical implications is still in its infancy This volume provides an invaluable resource for thinking through the ethical issues surrounding AI today and for shaping the study and development of AI in the coming years

The book delves into Morality And Machines. Morality And Machines is an essential topic that must be grasped by everyone, from students and scholars to the general public. This book will furnish comprehensive and in-depth insights into Morality And Machines, encompassing both the fundamentals and more intricate discussions.

1. This book is structured into several chapters, namely:

   - Chapter 1: Introduction to Morality And Machines
   - Chapter 2: Essential Elements of Morality And Machines
   - Chapter 3: Morality And Machines in Everyday Life
   - Chapter 4: Morality And Machines in Specific Contexts
   - Chapter 5: Conclusion

2. In chapter 1, this book will provide an overview of Morality And Machines. This chapter will explore what Morality And Machines is, why Morality And Machines is vital, and how to effectively learn about Morality And Machines.
3. In chapter 2, this book will delve into the foundational concepts of Morality And Machines. The second chapter will elucidate the essential principles that must be understood to grasp Morality And Machines in its entirety.
4. In chapter 3, the author will examine the practical applications of Morality And Machines in daily life. This chapter will showcase real-world examples of how Morality And Machines can be effectively utilized in everyday scenarios.
5. In chapter 4, this book will scrutinize the relevance of Morality And Machines in specific contexts. This chapter will explore how Morality And Machines is applied in specialized fields, such as education, business, and technology.
6. In chapter 5, the author will draw a conclusion about Morality And Machines. The final chapter will summarize the key points that have been discussed throughout the book.
   This book is crafted in an easy-to-understand language and is complemented by engaging illustrations. This book is highly recommended for anyone seeking to gain a comprehensive understanding of Morality And Machines.

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Morality And Machines Introduction

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