Ethical Principles For Socially Assistive Robotics

It's here: the latest edition of the one text you need to master assistive strategies, make confident clinical decisions, and help improve the quality of life for people with disabilities. Based on the Human Activity Assistive Technology (HAAT) model, Assistive Technologies: Principles and Practice, 4th Edition provides detailed coverage of the broad range of devices, services, and practices that comprise assistive technology, and focuses on the relationship between the human user and the assisted activity within specific contexts. Updated and expanded, this new edition features coverage of new ethical issues, more explicit applications of the HAAT model, and a variety of global issues highlighting technology applications and service delivery in developing countries. Human Activity Assistive Technology (HAAT) framework demonstrates assistive technology within common, everyday contexts for more relevant application. Focus on clinical application guides you in applying concepts to real-world situations. Review questions and chapter summaries in each chapter help you assess your understanding and identify areas where more study is needed. Content on the impact of AT on children and the role of AT in play and education for children with disabilities demonstrates how AT can be used for early intervention and to enhance development. Coverage of changing AT needs throughout the lifespan emphasizes how AT fits into people's lives and contributes to their full participation in society. Principles and practice of assistive technology provides the foundation for effective decision-making. NEW! Global issues content broadens the focus of application beyond North America to include technology applications and service delivery in developing countries. NEW! Ethical issues and occupational justice content exposes you to vital information as you start interacting with clients. NEW! More case studies added throughout the text foster an understanding of how assistive technologies are used and how they function. NEW! Updated content reflects current technology and helps keep you current. NEW! Explicit applications of the HAAT model in each of the chapters on specific technologies and more emphasis on the interactions among the elements make content even easier to understand.

This book brings together international experts from a wide variety of disciplines, in order to understand the impact that digital technologies have had on our well-being as well as our understanding of what it means to live a life that is good for us. The multidisciplinary perspective that this collection offers demonstrates the breadth and importance of these discussions, and represents a pivotal and state-of-the-art contribution to the ongoing discussion concerning digital well-being. Furthermore, this is the first book that captures the complex set of issues that are implicated by the ongoing development of digital technologies, impacting our well-being either directly or indirectly. By helping to clarify some of the most pertinent issues, this collection clarifies the risks and opportunities associated with deploying digital technologies in various social domains. Chapter 2 is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.

Diverse learners with exceptional needs require a specialized curriculum that will help them to develop socially and intellectually in a way that traditional pedagogical practice is unable to fulfill. As educational technologies and theoretical approaches to learning continue to advance, so do the opportunities for exceptional children. Special and Gifted Education: Concepts, Methodologies, Tools, and Applications is an exhaustive compilation of emerging research, theoretical concepts, and real-world examples of the ways in which the education of special needs and exceptional children is evolving. Emphasizing pedagogical innovation and new ways of looking at contemporary educational practice, this multi-volume reference work is ideal for inclusion in academic libraries for use by pre-service and in-service teachers, graduate-

level students, researchers, and educational software designers and developers.

In recent years, major results were reported on Brain-Computer Interface / Brain-Machine Interface (BCI/BMI) applied to rehabilitation in scientific reports and papers. This subject received much attention within the Society on Communication, Navigation, Sensing and Services (CONASENSE) during the period 2013-2015. Describing the state of the art on various BCI/BMI activities related to neuro-rehabilitation is the central theme of this book. The latest insights coming from neurophysiologists, neuropsychologists, ICT experts specialized in clinical data management and from representatives of patient organizations are elucidated and new ways for "BCI/BMI applied to rehabilitation" using advanced ICT are introduced. The book describes the latest progress in and is an appeal for an approach leading to more cost-saving multi-disciplinary neuro-rehabilitation. This book covers the following topics: · Overview on BCI/BMI applied to rehabilitation · ICT for Neuro-rehabilitation · ICT for new generation prostheses · Gaze tracking, facial orientation determination, face and emotion recognition in 3D space for neuro-rehabilitation applications · Integrated perspective for future wide spread integration of motor neuro-rehabilitation · Ethical issues in the use of Information and Communication Technologies in the health care of patients with neurological disorders

Ensuring that their work has a positive influence on society is a responsibility and a privilege for engineers, but also a considerable challenge. This book addresses the ways in which engineers meet this challenge, working from the assumption that for a project to be truly ethical both the undertaking itself and its implementation must be ethically sound. The contributors discuss varied topics from an international and interdisciplinary perspective, including l robot ethics; l outer space; l international development; l internet privacy and security; l green branding; l arms conversion; l green employment; and l deliberate misinformation about climate change Important questions are answered, such as l what is meant by engineering ethics and its practical implications; l how decisions made by engineers in their working lives make an impact at the global as well as the local level; and l what ethics-related questions should be asked before making such decisions. Ethical Engineering for International Development and Environmental Sustainability will be a valuable resource for practising and student engineers as well as all who are interested in professional ethics, especially as it relates to engineering. Researchers and policy makers concerned with the effects of engineering decisions on environmental sustainability and international stability will find this book to be of special interest.

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.

With increasing urgency, decisions about the digitalized future of healthcare and implementations of new assistive technologies are becoming focal points of societal and scientific debates and addresses large audiences. Decisions require a careful weighing of risks and benefits and

contextualizing in-depth ethical analysis with robust empirical data. However, up to now, research on social assistive technologies is mostly dispersed over different academic fields and disciplines. A comprehensive overview on discussions regarding values at stake and ethical assessment of recent developments especially in healthcare is largely missing. This publication initiates an interdisciplinary discourse on ethical, legal and social implications of socially assistive technologies in healthcare. Contributions include perspectives from nursing science, social sciences, philosophy, medical ethics, economics and law to present an – to our knowledge – first and comprehensive overview on different aspects of the use and implementation of socially assistive technologies from an ethical perspective. It combines practically relevant insights and examples from current research and development with ethical analysis to uncover exemplary moral tipping points between promotion of participation or well-being and risks and damages to these values. Healthcare professionals involved in implementation of smart technologies as well as scholars from the field of humanities, nursing and medicine, interested in the discussions on ethics and technology in healthcare, will benefit from this new contribution. The publication is part of the international DigitAs conference "Aging between Participation and Simulation – Ethical Dimensions of Socially Assistive Technologies" held at the Institute of Medical Ethics and History of Medicine (Ruhr University Bochum) from 4 February to 8 February 2019. Within this framework, twelve young scholars were invited to discuss their contributions with renowned experts in the field. The Institute of Medical Ethics and History of Medicine is one of the leading institutes in empirically informed ethical analysis in healthcare and medicine and is a member of the European Association of Centres of Medical Ethics (EACME).

Engineering Ethics: Challenges and Opportunities aims to set a new agenda for the engineering profession by developing a key challenge: can the great technical innovation of engineering be matched by a corresponding innovation in the acceptance and expression of ethical responsibility? Central features of this stimulating text include: · An analysis of engineering as a technical and ethical practice providing great opportunities for promoting the wellbeing and agency of individuals and communities. · Elucidation of the ethical opportunities of engineering in three key areas: Engineering for Peace, emphasising practical amelioration of the root causes of conflict rather than military solutions. Engineering for Health, focusing on close collaboration with healthcare professionals for both the promotion and restoration of health. Engineering for Development, providing effective solutions for the reduction of extreme poverty. · Innovative strategies for implementing these ethical opportunities are described: Emphasis on the personal responsibility of every engineer and on the benefits of supporting social structures. Use of language and concepts that are appealing to business managers and political decision makers. · Future prospects for increasing the acceptance and expression of ethical responsibility by engineers are envisaged. · Engineering Ethics: Challenges and Opportunities provides engineers, decision makers and the wider public with new understanding of the potential of engineering for the promotion of human flourishing.

Electronic Assistive Technology (EAT) is a subset of a wider range of products and services known as Assistive Technology (AT). AT is designed to support and enable people with disabilities, either acquired or congenital, to participate in activities with greater independence and safety. With a global aging population, it has an important role to play in enabling and supporting those with disability and their carers. Handbook of Electronic Assistive Technology discusses a range of commonly available or emerging electronic assistive technologies. It provides historical background, advice when assessing for these devices and references different models of provision. It includes both medical and

engineering aspects of provision. It is anticipated that the book will support students, trainees, and newly qualified Assistive Technology Practitioners to develop their understanding of the field, by considering the variables that could potentially influence the decision-making process when assessing for and providing this equipment. It also provides a reference point for those already practicing in this field and offers coverage of a broader range of technologies than clinicians may be exposed to, in their daily work This is the first reference book to focus on a comprehensive set of electronic assistive technologies and discuss their clinical application. Provides comprehensive coverage of electronic assistive devices Gives an overview of physical and cognitive pathologies and approaches for utilizing electronic assistive devices for individuals affected by these pathologies Covers essentials for assistive technology practitioners, human factors and technologies

This book contains a comprehensive overview of all current uses of robots in rehabilitation. The underlying principles in each application are provided. This is followed by a critical review of the technology available, of the utilization protocols, and of user studies, outcomes, and clinical evidence, if existing. Ethical and social implications of robot use are also discussed. The reader will have an in depth view of rehabilitation robots, from principles to practice.

The financial burden and the level of specialized care required to look after older adults with dementia has reached the point of a public health crisis. Older adults diagnosed and living with the disorder reached 35.6 million worldwide in 2010 and is expected to increase to 135.5 million in 2050, with costs soaring to $1.1 trillion. In the face of the increasing burden this disorder poses to health care systems and the management of this patient population, intelligent assistive technologies (IATs) represent a remarkable and promising strategy to meet the need of persons suffering from dementia. These technologies aim at helping individuals compensate for specific physical and cognitive deficits, and maintain a higher level of independence at home and in everyday activities. However, the rapid development and widespread implementation of these technologies are not without associated challenges at multiple levels. An international and multidisciplinary group of authors provide future-oriented and in-depth analysis of IATs. Part I delineates the current landscape of intelligent assistive technologies for dementia care and age-related disability from a global perspective, while the contributions in Part II analyze and address the major psycho-social implications linked to the development and clinical use of IATs. In the last section, essays examine the major ethical, social and regulatory issues associated with the use of IATs in dementia care. This volume provides an authoritative and comprehensive overview of how IATs are reshaping dementia care.

Living with Robots recounts a foundational shift in robotics, from artificial intelligence to artificial empathy, and foreshadows an inflection point in human evolution. As robots engage with people in socially meaningful ways, social

robotics probes the nature of the human emotions that social robots are designed to emulate.

Like the Internet before it, robotics is a socially and economically transformative technology. Robot Law explores how the increasing sophistication of robots and their widespread deployment into hospitals, public spaces, and battlefields requires rethinking of a wide variety of philosophical and public policy issues, including how this technology interacts with existing legal regimes, and thus may inspire changes in policy and in law. This volume collects the efforts of a diverse group of scholars who each, in their own way, has worked to overcome barriers in order to facilitate necessary and timely discussions of a technology in its infancy. Identifying controversial legal, ethical, and philosophical problems, the authors reveal how issues surrounding robotics and regulation are more complicated than engineers could have anticipated, and just how much definitional and applied work remains to be done. This groundbreaking examination of a brand-new reality will be of interest and of use to a variety of groups as the authors include engineers, ethicists, lawyers, roboticists, philosophers, and serving military.

Assistive Technologies- E-BookPrinciples and PracticeElsevier Health Sciences

The application of proper ethical systems and education programs is a vital concern in the medical industry. When healthcare professionals are held to the highest moral and training standards, patient care is improved. Healthcare Ethics and Training: Concepts, Methodologies, Tools, and Applications is a comprehensive source of academic research material on methods and techniques for implementing ethical standards and effective education initiatives in clinical settings. Highlighting pivotal perspectives on topics such as e-health, organizational behavior, and patient rights, this multi-volume work is ideally designed for practitioners, upper-level students, professionals, researchers, and academics interested in the latest developments within the healthcare industry.

It is well-established that while cognitive psychology provides a sound foundation for an understanding of our interactions with digital technology, this is no longer sufficient to make sense of how we use and experience the personal, relational and ubiquitous technologies that pervade everyday life. This book begins with a consideration of the nature of experience itself, and the user experience (UX) of digital technology in particular, offering a new, broader definition of the term. This is elaborated though a wide-ranging and rigorous review of what are argued to be the three core UX elements. These are involvement, including shared sense making, familiarity, appropriation and "being-with" technologies; affect, including emotions with and about technology, impressions, feelings and mood; and aesthetics, including embodied aesthetics and neuroaesthetics. Alongside this, new insights are introduced into how and why much of our current use of digital technology is simply idling, or killing time. A particular feature of the book is a thorough treatment of parallel, and sometimes competing, accounts from differing academic traditions. Overall, the discussion considers both foundational

and more recent theoretical and applied perspectives from social psychology, evolutionary psychology, folk psychology, neuroaesthetics, neuropsychology, the philosophy of technology, design and the fine arts. This broad scope will be enlightening and stimulating for anyone concerned in understanding UX. A Psychology of User Experience stands as a companion text to the author's HCI Redux text which discusses the contemporary treatment of cognition in human-computer interaction.

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.

Now in its fourth edition trusted textbook Older People: Issues and Innovations in Care provides a unique collection of conversations and commentaries by leading international and local experts on a range of contemporary issues around the care of older people. Featuring six new chapters, current research and policy changes, the esteemed author team continue to highlight the importance of interdisciplinary healthcare in providing a comprehensive, person-centred approach to care. This edition encourages readers to explore care issues, innovations and change, and to utilise evidence-based practice to improve the care of older people and their families. - Editors' comments precede each

chapter, providing a snapshot of the issues addressed. - Dementia care has an increased focus. New chapters include: - Caring for older people: issues for consumers - Younger people in residential aged care facilities - Health and care of older Aboriginal and Torres Strait Islander peoples - Alzheimer's dementia: neuropsychology, early diagnosis and intervention - Self-esteem, dignity and finding meaning in dementia - My journey of heartbreak: my parents and Alzheimer's disease. - Vignettes highlight innovative approaches to care that result in improved health outcomes for older people. - Key points are woven through the text to reiterate vital information relevant to nurses and aged care workers. - Reflective questions encourage critical thinking as an instrument for improving practice. - In-text references are made to video interviews available on the Evolve site. This text reflects new thinking in care; include the ideas and experiences of policy analysts, nurses, doctors, allied health professionals and the consumer experience mainly from Australia but with international contributions and be based on contemporary research. It will also point readers to 'the evidence' where it exists, and include vignettes of practice and 'video' clips where appropriate.

This book constitutes the refereed proceedings of the 4th International Conference on Social Robotics, ICSR 2012, held in Chengdu, China, in October 2012. The 66 revised full papers were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on affective and cognitive sciences for socially interactive robots, situated interaction and embodiment, robots to assist the elderly and persons with disabilities, social acceptance of robots and their impact to the society, artificial empathy, HRI through non-verbal communication and control, social telepresence robots, embodiments and networks, interaction and collaboration among robots, humans and environment, human augmentation, rehabilitation, and medical robots I and II.

This volume explores the ethical questions that arise in the development, creation and use of robots that are capable of semiautonomous or autonomous decision making and human-like action. It examines how ethical and moral theories can and must be applied to address the complex and critical issues of the application of these intelligent robots in society. Coverage first presents fundamental concepts and provides a general overview of ethics, artificial intelligence and robotics. Next, the book studies all principal ethical applications of robots, namely medical, assistive, socialized and war roboethics. It looks at such issues as robotic surgery, children-robot and elderly-robot therapeutical/social interactions and the use of robots, especially autonomous lethal ones, in warfare. In addition, a chapter also considers Japanese roboethics as well as key intercultural and robot legislation issues. Overall, readers are provided with a thorough investigation into the moral responsibility (if any) of autonomous robots when doing harm. This volume will serve as an ideal educational source in engineering and robotics courses as well as an introductory reference for researchers in the field.

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.

The robotics industry is growing rapidly, and to a large extent the development of this market sector is due to the area of social robotics – the production of robots that are designed to enter the space of human social interaction, both physically and semantically. Since social robots present a new type of social agent, they have been aptly classified as a disruptive technology, i.e. the sort of technology which affects the core of our current social practices and might lead to profound cultural and social change. Due to its disruptive and innovative potential, social robotics raises not only questions about utility, ethics, and legal aspects, but calls for "robo-philosophy" – the comprehensive philosophical reflection from the perspectives of all philosophical disciplines. This book presents the proceedings of the first conference in this new area, "Robo-Philosophy 2014 – Sociable Robots and the Future of Social Relations, held in Aarhus, Denmark, in August 2014. The short papers and abstracts collected here address questions of social robotics from the perspectives of philosophy of mind, social ontology, ethics, meta-ethics, political philosophy, aesthetics, intercultural philosophy, and metaphilosophy. Social robotics is still in its early stages, but it is precisely now that we need to reflect its possible cultural repercussions. This book is accessible to a wide readership and will be of interest to everyone involved in the development and use of social robotics applications, from social roboticists to policy makers.

Written specifically for Physical Therapist Assistant (PTA) students, this text is an excellent introduction for physical therapist assistant s education. This new edition includes updated information regarding the relationship between the Physical Therapist (PT) and PTA and key concepts of the Guide to Physical Therapist Practice for better understanding

of clinical guidelines. It also includes new information regarding clinical trends in physical therapy. Utilizing this text specifically for PTAs, instructors can introduce students to information regarding professionalism, professional roles, interpersonal communication, physical therapist s behavior and conduct, teaching and learning, and evidence based practice. This comprehensive text will provide a valuable resource throughout the physical therapist assistant s education and training throughout the entire duration of the PTA program. New to Second Edition: Distinctive description of physical therapy developments from its Formative Years (1914-1920) to the APTA s Vision and Application of Scientific Pursuit of today PTA s usage of the APTA's Guide to Physical Therapist Practice Differences between physical therapy and medical diagnosis Contemporary clinical trends regarding wellness, health promotion and disease prevention Instructor Resources: Transition Guide, PowerPoint slides and TestBank"

These volumes of "Advances in Intelligent Systems and Computing" highlight papers presented at the "Third Iberian Robotics Conference (ROBOT 2017)". Held from 22 to 24 November 2017 in Seville, Spain, the conference is a part of a series of conferences co-organized by SEIDROB (Spanish Society for Research and Development in Robotics) and SPR (Portuguese Society for Robotics). The conference is focused on Robotics scientific and technological activities in the Iberian Peninsula, although open to research and delegates from other countries. Thus, it has more than 500 authors from 21 countries. The volumes present scientific advances but also robotic industrial applications, looking to promote new collaborations between industry and academia.

Systems, cybernetics, control, and automation (SCCA) are four interrelated and overlapping scientific and technological fields that have contributed substantially to the development, growth, and progress of human society. A large number of models, methods, and tools were developed that assure high efficiency of SCCA applied to practical situations. The real-life applications of SCCA encompass a wide range of man-made or biological systems, including transportations, power generation, chemical industry, robotics, manufacturing, cybernetics organisms (cyborgs), aviation, economic systems, enterprise, systems, medical/health systems, environmental applications, and so on. The SCCA fields exhibit strong influences on society and rise, during their use and application, many ethical concerns and dilemmas. This book provides a consolidated and concise overview of SCCA, in a single volume for the first time, focusing on ontological, epistemological, social impact, ethical, and general philosophical issues. It is appropriate for use in engineering courses as a convenient tutorial source providing fundamental conceptual and educational material on these issues, or for independent reading by students and scientists. Included in the book is: Background material on philosophy and systems theoryMajor ontological, epistemological, societal and ethical/philosophical aspects of the four fields that are considered in the bookOver 400 references and a list of 130 additional books in the relevant fields Over 100 colored photos and 70

line figures that illustrate the text

The field of assistive technology is influenced by the ongoing and rapid development of mainstream technologies on the one hand and continuing changes to social systems in relation to societal events - such as the ageing of the population - on the other. The articles in this book provide a broad overview of developments in technical support for people with functional restrictions: key technologies like telecommunications and IT are addressed, while low-tech practical solutions are also considered.

This book describes how assistive technology can help handicapped, elderly and acutely sick people to manage their daily lives better and stay safe in the home. It discusses how safety is understood from an ethical, technical and social perspective, and offers examples of the problems that users, their helpers and professional carers have with assistive technology in everyday situations. The book provides insights from user-centred research and uses photographs to illustrate the main topic: how users and technology can work together to ensure safety. User-focused and combining experience with research, the book will interest users of these kinds of technology, health professionals who might introduce and/or prescribe them, engineers who develop and sell assistive technological gadgets, and architects who build safe homes – as well as researchers and students who work in these fields. It provides an overview of the existing technology, examines ways to test its effectiveness from the point of view of users, health professionals and researchers from different fields (architecture, education, engineering, facility management, medicine, nursing, occupational therapy, rehabilitative medicine, physiotherapy, social science and speech therapy), and lists useful addresses, websites and literature

Present day sophisticated, adaptive, and autonomous (to a certain degree) robotic technology is a radically new stimulus for the cognitive system of the human learner from the earliest to the oldest age. It deserves extensive, thorough, and systematic research based on novel frameworks for analysis, modelling, synthesis, and implementation of CPSs for social applications. Cyber-Physical Systems for Social Applications is a critical scholarly book that examines the latest empirical findings for designing cyber-physical systems for social applications and aims at forwarding the symbolic human-robot perspective in areas that include education, social communication, entertainment, and artistic performance. Highlighting topics such as evolinguistics, human-robot interaction, and neuroinformatics, this book is ideally designed for social network developers, cognitive scientists, education science experts, evolutionary linguists, researchers, and academicians.

This book will help researchers and engineers in the design of ethical systems for robots, addressing the philosophical questions that arise and exploring modern applications such as assistive robots and self-driving cars. The contributing

authors are among the leading academic and industrial researchers on this topic and the book will be of value to researchers, graduate students and practitioners engaged with robot design, artificial intelligence and ethics.

This book is part of the Human Centered Book Trilogy, the 2021 volumes of the Routledge Human Centered Management HCM Series. HCM books are pioneering transformation from the traditional humans-as-a-resource approach of the industrial past, to the humans at the center management and organizational paradigm of the 21st century. HCM is built on the talent and wellbeing of people in the workplace driving work engagement, quality standards, high performance and productivity to attain long-term organizational sustainability in the global VUCA (volatile, uncertain, complex, ambiguous) environment. This book was carefully crafted by recognized international human centered scholars from four continents. Models presented bridge persistent Soft Skills gaps in management and business and particularly between education and the workforce due to excessive testing and hard/technical skills. In contrast with hard skills, Soft Skills are transferable across jobs, industries and applicable to all dimensions of life. Soft Skills are the common language of empathy, collaboration, team building, resilience and agility transforming organizations. Human and social challenges cannot be solved only with hard skills. This is a "must read Soft Skills manual" for survival and success based on attributes all human beings possess but not everybody is optimizing to excel in life and work. This and its two complementary titles Human Centered Organizational Culture: Global Dimensions and Sensible Leadership: Human Centered, Insightful and Prudent are timely readings for leaders, managers, researchers, academics, practitioners, students and the general public responsible for organizations across industries and sectors pursuing quality standards, organizational transformation and sustainability.

This volume offers eleven philosophical investigations into our future relations with social robots--robots that are specially designed to engage and connect with human beings. The contributors present cutting edge research that examines whether, and on which terms, robots can become members of human societies. Can our relations to robots be said to be "social"? Can robots enter into normative relationships with human beings? How will human social relations change when we interact with robots at work and at home? The authors of this volume explore these questions from the perspective of philosophy, cognitive science, psychology, and robotics. The first three chapters offer a taxonomy for the classification of simulated social interactions, investigate whether human social interactions with robots can be genuine, and discuss the significance of social relations for the formation of human individuality. Subsequent chapters clarify whether robots could be said to actually follow social norms, whether they could live up to the social meaning of care in caregiving professions, and how we will need to program robots so that they can negotiate the conventions of human social space and collaborate with humans. Can we perform joint actions with robots, where both sides need to honour commitments, and

how will such new commitments and practices change our regional cultures? The authors connect research in social robotics and empirical studies in Human-Robot Interaction to recent debates in social ontology, social cognition, as well as ethics and philosophy of technology. The book is a response to the challenge that social robotics presents for our traditional conceptions of social interaction, which presuppose such essential capacities as consciousness, intentionality, agency, and normative understanding. The authors develop insightful answers along new interdisciplinary pathways in "robophilosophy," a new research area that will help us to shape the "robot revolution," the distinctive technological change of the beginning 21st century.

This book deals with the growing challenges of using assistive robots in our everyday activities along with providing intelligent assistive services. The presented applications concern mainly healthcare and wellness such as helping elderly people, assisting dependent persons, habitat monitoring in smart environments, well-being, security, etc. These applications reveal also new challenges regarding control theory, mechanical design, mechatronics, portability, acceptability, scalability, security, etc.

Healthcare practices have been enhanced through the use of information technologies and analytical methods. A cross between computer science, healthcare, and information science is needed for the optimization of data resources and information systems within the healthcare industry. Healthcare Informatics and Analytics: Emerging Issues and Trends introduces the latest research concerning the innovative implementation of information technology and data analysis in the healthcare field. Highlighting current concerns and recent advances in patient care and healthcare delivery, this book is a comprehensive reference source for academics, researchers, medical students, and healthcare practitioners interested in the application of information science within the health sector.

This book makes a consolidated guided tour to the world of sociorobots (social or socialized robots). Sociorobots and assistive robots provide entertainment, assistance to the handicapped, companionship to the elderly and health care to autistic children and people with dementia. The book provides, in a fluent educational way, all major concepts, architectures and design methodologies. All types of sociorobots are examined, namely walking anthropomorphic, wheeled anthropomorphic, fixed-place anthropomorphic and zoomorphic sociorobots. The book provides an outline of sociorobot intelligent control architectures, robot learning and human robot interaction.

This book will help students develop their understanding of how the internet is impacting on social work education and practice in 21st century. Essential reading for students interested in the influence of digital technology and social media, including the impact of digital divides, this book looks at how the value-base of social work can have a positive effect on service users and carers who engage with digital services.

Social isolation and loneliness are serious yet underappreciated public health risks that affect a significant portion of the older adult population. Approximately one-quarter of community-dwelling Americans aged 65 and older are considered to be socially isolated, and a significant proportion of adults in the United States report feeling lonely. People who are 50 years of age or older are more likely to experience many of the risk factors that can cause or exacerbate social isolation or loneliness, such as living alone, the loss of family or friends, chronic illness, and sensory impairments. Over a life course, social isolation and loneliness may be episodic or chronic, depending upon an individual's circumstances and perceptions. A substantial body of evidence demonstrates that social isolation presents a major risk for premature mortality, comparable to other risk factors such as high blood pressure, smoking, or obesity. As older adults are particularly high-volume and high-frequency users of the health care system, there is an opportunity for health care professionals to identify, prevent, and mitigate the adverse health impacts of social isolation and loneliness in older adults. Social Isolation and Loneliness in Older Adults summarizes the evidence base and explores how social isolation and loneliness affect health and quality of life in adults aged 50 and older, particularly among low income, underserved, and vulnerable populations. This report makes recommendations specifically for clinical settings of health care to identify those who suffer the resultant negative health impacts of social isolation and loneliness and target interventions to improve their social conditions. Social Isolation and Loneliness in Older Adults considers clinical tools and methodologies, better education and training for the health care workforce, and dissemination and implementation that will be important for translating research into practice, especially as the evidence base for effective interventions continues to flourish.

This book is open access under a CC BY 4.0 license. This timely book addresses the conflict between globalism and nationalism. It provides a liberal communitarian response to the rise of populism occurring in many democracies. The book highlights the role of communities next to that of the state and the market. It spells out the policy implications of liberal communitarianism for privacy, freedom of the press, and much else. In a persuasive argument that speaks to politics today from Europe to the United States to Australia, the author offers a compelling vision of hope. Above all, the book offers a framework for dealing with moral challenges people face as they seek happiness but also to live up to their responsibilities to others and the common good. At a time when even our most basic values are up for question in policy debates riddled with populist manipulation, Amitai Etzioni's bold book creates a new frame which introduces morals and values back into applied policy questions. These questions span the challenges of jobless growth to the unanswered questions posed by the role of artificial intelligence in a wide range of daily life tasks and decisions. While not all readers will agree with the communitarian solutions that he proposes, many will welcome an approach that is, at its core,

inclusive and accepting of the increasingly global nature of all societies at the same time. It is a must read for all readers concerned about the future of Western liberal democracy. Carol Graham, Leo Pasvolsky Senior Fellow, The Brookings Institution and College Park Professor/University of Maryland In characteristically lively, engaging, and provocative style Etzioni tackles many of the great public policy dilemmas that afflict us today. Arguing that we are trapped into a spiral of slavish consumerism, he proposes a form of liberal communitarian that, he suggests, will allow human beings to flourish in changing circumstances. Jonathan Wolff, Blavatnik Chair of Public Policy, Blavatnik School of Government, University of Oxford

This two-volume set constitutes the refereed proceedings of the 15th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2021, held as part of the 23rd International Conference, HCI International 2021, held as a virtual event, in July 2021. The total of 1276 papers and 241 posters included in the 39 HCII 2021 proceedings volumes was carefully reviewed and selected from 5222 submissions. UAHCI 2021 includes a total of 84 papers; they focus on topics related to universal access methods, techniques and practices, studies on accessibility, design for all, usability, UX and technology acceptance, emotion and behavior recognition for universal access, accessible media, access to learning and education, as well universal access to virtual and intelligent assistive environments.