

1. Record Nr.	UNINA9910568238703321
Titolo	Interactive Robotics: Legal, Ethical, Social and Economic Aspects : Selected Contributions to the INBOTS Conference 2021, 18-20 May, 2021 // edited by María Amparo Grau Ruiz
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783031043055 9783031043048
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (258 pages)
Collana	Biosystems & Biorobotics, , 2195-3570 ; ; 30
Disciplina	629.892 629.8924019
Soggetti	Robotics Technology - Moral and ethical aspects Social justice Information technology - Law and legislation Mass media - Law and legislation Industrial policy Robotic Engineering Ethics of Technology Social Justice IT Law, Media Law, Intellectual Property Regulation and Industrial Policy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Foreword -- Preface -- Organization -- Committees -- Organizing Committee of the INBOTS Conference 2021 -- Organizing Committee of the WP2 Session on ELSE Issues -- Contents -- Ethics -- Basic Issues in AI Policy -- 1 AI -- 2 AI Ethics -- 3 Ethical AI -- 3.1 Explanation -- 3.2 AI Ethics Guidelines -- 4 AI Policy -- 4.1 Definition -- 4.2 Policy Aims -- 4.3 Policy Means -- 4.4 EU Regulatory Efforts -- References -- Ethical Issues Relating to the Environmental Impact of Social Robots -- 1 Introduction -- 2 Background -- 3 Discussion --

4 Conclusion -- References -- Human Vulnerability and Inclusive Robotics -- 1 Introduction -- 2 Human Vulnerability -- 3 Vulnerability and Technology -- 4 Technology-Friendly, Non-essentialist Account of Vulnerability -- 5 Conclusion -- References -- Robot-Human Gaze Behaviour: The Role of Eye Contact and Eye-Gaze Patterns in Human-Robot Interaction (HRI) -- 1 Introduction -- 2 Joint Attention and Joint Action with Social Robots -- 3 Feature Engineering for HRI: The Necessity of the Eyes -- 4 Conclusion -- References -- Neuro-Rights for Human-Machine Interaction -- 1 Human Beings as Socio-Technical Systems -- 2 Some Essential Risks -- 3 New Human Rights: Neuro-Rights -- 4 Conclusion -- References -- Rethinking Environmental Vulnerability -- 1 Introduction -- 2 Terms and Methods -- 2.1 Environment -- 2.2 Vulnerability -- 2.3 Methods -- 3 Argument and Discussion -- 4 Conclusion -- References -- Work -- The Ethical Debate on Human Work: A Labour Law Approach -- 1 Introduction: Aspects and Characteristics of Human Work -- 2 AI, Robots and Machines: Do They Have Rights? -- 3 Human Work and Social Justice: The Foundation on Which to Build the Future -- References -- Digitalisation: Shaping the Way We Work -- 1 Introduction -- 2 Shaping the Way We Work -- References. Robotisation and Its Social Implications: The Skills Gaps and Digital Learning -- 1 Introduction -- 2 Labour Market Polarisation -- 2.1 Skill Gaps and Wage Gaps -- 2.2 Training and Qualification: Digital Learning -- 2.3 Proposals of Vocational Training for Employment -- 3 Conclusion -- References -- A Skilled Workforce - Ready to Contribute to Tomorrow's World of Work -- 1 Introduction -- Inclusive Robotics for the Employment of People with Disabilities -- 1 Introduction -- 2 Current Work Situation of People with Disabilities -- 3 Robot Definition -- 4 Some Examples of Inclusive Robotics for People with Disabilities -- 4.1 Physical Disability [11] -- 4.2 Sensory Disability: Speech Impairment -- 4.3 Sensory Disability: Blind People -- 4.4 Sensory and Intellectual Disability -- 4.5 For All Types of Disability -- 5 Conclusion -- References -- Diligence of IT Security: Employee Awareness Tests as a Legal Challenge in Portugal -- 1 Introduction -- 2 A Few Conclusions -- References -- Economy, Intellectual Property and Taxation -- Robot and Automation. Which are the Impacts on the Productivity, Jobs and Inequality of the Countries? -- 1 Introduction -- 2 Robot Density, Productivity and Unemployment -- 3 Job Loss or Job Creation? -- 4 Does Automation Increase or Reduce Inequality in Countries? -- 5 Conclusion -- References -- Intellectual Property Law and Robotics -- 1 Introduction -- 2 Novel Issues -- 2.1 IP and Robotics -- 2.2 Smart Robots -- 3 The Field of Robotics -- 4 Conclusion -- Robot-A(I)rtists and Tax Provisions -- 1 Introduction -- 2 Robots, AI and the Arts -- 3 Reasons Why Robots and AI Creativity Becomes Relevant in the Tax Realm -- 3.1 The Concept of Work of Art in VAT Provisions -- 3.2 The Concept of Work of Art in Direct Tax Provisions -- 3.3 Can Robotic/AI Art Fall Under the Tax Concept of Work of Art? -- 4 Conclusion -- References. Taxing Robots -- 1 Introduction -- 2 Why Taxing Robots is Problematic -- 3 Why Taxing Robots is Appealing -- 4 Conclusion -- References -- Taxing Robots or Artificial Intelligence -- 1 Introduction -- 2 Current Perspective of the Proposal -- 3 Legal Justifications of a Tax on Artificial Intelligence or Robots -- 4 A Need for an International Coordination -- Taxes on the Use of Robots -- 1 Introduction -- 2 Different Types of Taxation -- 2.1 Direct and Indirect Taxation -- 2.2 Subjective and Objective Taxation -- 2.3 Personal and Real Taxation -- 3 Structure of the Robot Tax -- 3.1 Subjective Element -- 3.2 Objective Element -- 4 The Concept of Notional Imputed Income -- References

-- The Need to Assign a Tax Value to Economic Activities Based on Data Transactions -- 1 Introduction -- 2 Material and Methods -- 3 Results -- 4 Discussion -- 5 Review of Existing Proposals -- 6 Conclusions -- References -- The Robotisation of Tax Administration -- 1 Introduction -- 2 The Growth of AI in Tax Administration -- 3 The Risks of Using AI in Tax Administration -- 4 Conclusion -- References -- The Digitalization of Relations Between Citizens and Tax Administrations -- 1 Introduction -- 2 The Leadership of the Electronic Tax Agency -- 2.1 A Pioneer in the Massive Use of Electronic Tools -- 2.2 From the Traditional Administrative Procedure to the Cooperative Relationship -- 2.3 A Potential Threat to Citizens' Rights -- 3 Limits to Technology -- 3.1 General Principles and Rights -- 3.2 Take off of Digital Rights -- 4 Conclusion -- References -- Robotization in Excise Duties: Has It Arrived with the Immediate Supply of Accounting Books (SILICIE)? -- 1 Introduction -- 2 Material and Methods -- 3 Results -- 4 Discussion -- 5 Conclusions -- References -- Artificial Intelligence and Robots: The Role of Tax Legislator, A Conundrum to Solve -- 1 Introduction. 2 Taxing or Incentiving? -- 3 Digitalization of Fiscal Administration: Self-compliance Instruments and Means of Contrast to Illicit Tax Practices -- 4 Conclusion -- References -- Social Security and Robotization -- 1 Introduction -- 2 Sustainability Concerns Affecting Both the Social Security System and the Companies -- 3 An Integrative Solution Combining Principles in the Tax and the Social Security Systems -- 4 An Approach Coherent with the Proposals Made by the International Social Security Association -- 5 Remark on Positive Impacts of Robotics -- 6 Conclusion -- References -- Pensions, Robotics and Taxes, the New Challenges of Taxation -- 1 Introduction -- 2 Welfare System Crisis -- 3 The Contribution of Robots to Pensions -- 4 Some Tax Measures That Can Complement the Reduction in Income from the Spread of Automation -- 5 Conclusion -- References -- Taxation and Robotics in the Recent EU Context: Should My Dishwasher Contribute to Repay the Post-COVID-19 Debt? -- 1 Introduction -- 2 COVID-19 Pandemic and Economic Crisis -- 3 Robot Tax as Contribute to Repay the Post-COVID-19 Debt -- 4 Conclusion -- References -- Corporate Social Responsibility and Sustainability -- Technological Change and Regulatory Protection of the Autonomy of People with Disabilities -- 1 Introduction -- 2 Materials and Methods -- 3 Results -- 4 Discussion -- 5 Conclusion -- References -- Robotics, Childhood and Youth -- 1 Introduction -- 2 Present Situation -- 3 Texts Requiring Adaptation -- 3.1 In General -- 3.2 Specifically -- 4 New Standards? -- 5 Conclusion -- References -- Interactive Robotics and Children's Human Rights -- 1 Three Domains of Robot-Child Interaction -- 2 Dignity and Human Rights in Child-Robot Interaction -- 3 Ethical Requirements for Robotics Design -- 4 Conclusions -- References -- Analysis of Sustainability Reports in Two Industrial Companies. 1 Introduction -- 2 Analysis of the Ottobock Company Report Leadership of the Electronic Tax Agency -- 3 Össur Company Report Analysis -- 4 Conclusion -- References -- Intelligent Management and Control of Data Contained in Non-financial Reporting -- 1 Introduction -- 2 The Control Systems Required in the NFR by the European Union at the Present Time -- 3 The Possibilities of Improving NFR Controls Through Robotics, Artificial Intelligence and Blockchain -- 4 Correlation of These Improvements with Environmental Taxation -- 5 Conclusion -- References -- Governance and Regulation -- How to Better Involve Organised Civil Society in Regulating Robotics -- 1 Introduction -- 2 Discussions -- 3

Towards a Strengthened Framework for Co-operation -- References --
Can the Legal Requirements Foreseen for Other Sectors Aimed
at Protecting the Market and, Ultimately, the People and Users
Themselves, Be Transferred to the Robotics Industry Sector? -- 1
Introduction -- 2 The Correct Supervision of Robots -- 3 Consumers
Protection -- 4 Conclusion -- References -- Perspectives
from the Legal Practice: Robotics -- 1 Introduction -- 2 Perspectives
from Legal Practice -- 2.1 Sophia the Robot and the Metaverse -- 2.2
Tesla Bot -- 2.3 Transhumanism: Politics of Hybridizing Humans
with Robots -- 2.4 Human Rights in the New Wave of Transhumanism
-- 2.5 Three Paraplegics Walk Again One Day After Receiving Electronic
Implants -- 2.6 The Phenomenon of Self-driving Cars -- 3 Conclusion
-- LIAISON: Liaising Robot Development and Policymaking to Reduce
the Complexity in Robot Legal Compliance -- 1 Introduction -- 2
A Legal 'Tragedy of the Commons' -- 3 Liaison: The Model -- 4 Key
Findings, Lessons Learned and Discussion -- 5 Conclusions --
References -- Towards Evidence-Based Standard-Making for Robot
Governance -- 1 Introduction -- 2 The FSTP Propelling within H2020
Eurobench.
3 Literature Search Findings.

Sommario/riassunto

This book reports on cutting-edge legal, ethical, social and economic issues relating to robotics and automation, human-machine interaction and artificial intelligence, in different application areas. It discusses important problems such as robotic taxation, social inequality, protection of neuro-human and children rights, among others. It describes current advances and challenges in robotic regulation and governance, as well as findings relating to sustainability of robotic industries, thus filling an important gap in the robotic and AI literature. Chapters consists of revised and extended contributions to the workshop session "Debate on legal, ethical & socio-economic aspects of interactive robotics" of INBOTS 2021, held virtually on May 18-20, 2021.
