

1. Record Nr.	UNINA9910793812003321
Autore	Skene Keith <1965->
Titolo	Artificial Intelligence and the Environmental Crisis [[electronic resource]]: Can Technology Really Save the World?
Pubbl/distr/stampa	Milton, : Routledge, 2019
ISBN	042961909X 0429621248 0429055676
Descrizione fisica	1 online resource (277 pages)
Disciplina	363.70028563
Soggetti	Artificial intelligence - Environmental applications Artificial intelligence - Moral and ethical aspects Artificial intelligence - Social aspects Environmental sciences - Data processing Information storage and retrieval systems - Environmental protection Sustainability - Technological innovations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record. VIII.9. The central role of AI in feedback: Shaping our new world
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover -- Title Page -- Copyright Page -- Dedication -- Contents -- Preface -- Section I: Artificial Intelligence and the Internet of Things -- I.1. Nothing new under the Sun -- I.2. Oh, for a nice cold soda: The birth of the internet of things -- I.3. The two-month, ten-man project to transform the world -- I.4. Getting to grips with the jargon: Symbolic and non-symbolic AI -- Section II: Should I stay or should I go? Ethics in AI -- II.1. Choosing an ethical framework -- II.2. The strange case of Asimov's laws -- II.3. Free will and moral judgement II.4. The confused owl of Minerva: Dangers of a moral vacuum -- II.5. Who's in charge of the big bad wolf? -- II.6. What should a declaration of AI rights look like? -- Section III: Gender, Race, Culture and Fear -- III.1. Gender issues in AI -- III.2. Racial issues in AI -- III.3. Cultural issues in AI -- III.4. Fear and loathing in AI -- Section IV: The Thinker: Human Intelligence -- IV.1. Human intelligence: Carolus Linnaeus and his wise, wise men -- IV.2. So what is human intelligence? -- IV.3.

Philosophy and intelligence: The framing of our thoughts

Section V: Other Modes of Intelligence: Thinking Outside the Human

Box -- V.1. Animal intelligence: Machiavellian sentience and the

wisdom of the swarm -- V.2. Plant intelligence: Headless, brainless,

dispersed intelligence -- V.3. Microbial intelligence: Gene-swapping

revelry in the quorum -- V.4. Ecosystem intelligence: Systems thinking

in the cathedral of thought -- V.5. Systems are non-linear -- V.6.

Systems are emergent -- V.7. Systems are sub-optimal -- V.8. Systems

rely of real-time feedback -- Section VI: Highway to Hell: The

Existentialist Threat Facing Humankind

VI.1. A brief history of our path towards destruction -- VI.2. The five

clear road signs that point towards criticality -- VI.3. Why ecological

damage matters to us -- VI.4. Adam Smith and his invisible hand -- VI.

5. Kuznets and his curve: How ninety five percent speculation led us

badly astray -- Section VII: Forget the Romans. What has AI ever done

for us? -- VII.1. AI and economics: The best of things or the worst of

things? -- VII.2. AI and society -- VII.3. AI and the environment -- VII.

4. Technology and sustainability: Bellicose bedfellows or Romeo and

Juliet?

Section VIII: Imagining a New World -- VIII.1. The swallow whose nest

was stolen: A salutary tale -- VIII.2. Blinded by the bling: Dashboard

dogs and a disappearing sea -- VIII.3. What needs changed and what

change do we need? -- VIII.4. The chains that bind: Taking

responsibility for our footprints -- VIII.5. The Ogiek people and the

new, improved invisible hand -- VIII.6. Lessons from the edge of the

world: The St Kildan legacy -- VIII.7. The Garden of Eden complex: How

not to fix the world -- VIII.8. The three cornerstones: Diversity,

resilience and integration

Sommario/riassunto

A radical and challenging book which argues that artificial intelligence needs a completely different set of foundations, based on ecological intelligence rather than human intelligence, if it is to deliver on the promise of a better world. This can usher in the greatest transformation in human history, an age of re-integration. Our very existence is dependent upon our context within the Earth System, and so, surely, artificial intelligence must also be grounded within this context, embracing emergence, interconnectedness and real-time feedback. We discover many positive outcomes across the societal, economic and environmental arenas and discuss how this transformation can be delivered. Key Features: Identifies a key weakness in current AI thinking, that threatens any hope of a better world. Highlights the importance of realizing that systems theory is an essential foundation for any technology that hopes to positively transform our world. Emphasizes the need for a radical new approach to AI, based on ecological systems. Explains why ecosystem intelligence, not human intelligence, offers the best framework for AI. Examines how this new approach will impact on the three arenas of society, environment and economics, ushering in a new age of re-integration.
