

# GLOBAL INFORMATION SOCIETY WATCH 2019

## *Artificial intelligence: Human rights, social justice and development*



ASSOCIATION FOR PROGRESSIVE COMMUNICATIONS (APC),  
ARTICLE 19, AND SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY (SIDA)

# Global Information Society Watch

## 2019



## Global Information Society Watch 2019

Artificial intelligence: Human rights, social justice and development

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### Introduction

The artificial intelligence (AI) technology revolution is set to eclipse the industrial revolution. Where once commonplace trades were dissolved by mass production industries and workers drawn from subsistence living to man-handle factories, AI will replace pretty much every routine job on the planet.<sup>1</sup> The only jobs protected from an AI-augmented workforce are what Kai-Fu Lee, venture capitalist and AI pioneer, describes as jobs of compassion and creativity. “AI,” says Lee, “can optimise, but not create.”<sup>2</sup>

I am a creator, a filmmaker and musician with a background in community media. Toby Walsh, one of Australia’s leading experts in AI, argues that those who raise alarm about an AI achieving consciousness and thereby deciding all humans are expendable are unlikely to be computer scientists and least of all computer scientists who work with and on AI technologies.<sup>3</sup> I am neither. I am neither a computer scientist, nor am I alarmed.

Technology has fascinated me near on as much as nature. Observing both, at times intimately, throughout my career, it is a sad irony that as we create the most incredible of means to advance all facets of knowledge, our rapacious hunger for the Earth’s natural resources is consuming the biosphere all life depends on. Yet we skirt, if not flirt at the edge of technologies that increasingly mimic or resemble human behaviour, more commonly referred to in AI circles as the “uncanny valley”.<sup>4</sup>

Researching this report has been illuminating. There are so many life-affirming AI projects underway, it is bizarre and actually frightening that some governments prefer to invest in AI-assisted surveillance and warfare than direct all efforts towards solving the crisis we are in. That said, there is not a single person whose work I reference that is not aware of the precipice we have neared.

In this report, I contextualise the debates concerning AI in the context of the creative industries in Australia.

I then expand the discussion to outline the policy levers that need to be considered in both the Australian and international contexts. This includes steps one can take to ensure that what some say could be humanity’s greatest or most disastrous creation<sup>5</sup> becomes a transformative technology that works with and not against the best interests of society. Is the world we create with AI, as Walsh hopes for, “the one that we want?”<sup>6</sup>

### Background

In 1994, Australia’s first Commonwealth cultural policy document, *Creative Nation*, was published.<sup>7</sup> Cultural production gave way to the term creative industries, broadening Australians’ understanding of the arts and re-framing culture in economic terms. The language of arts and cultural practice changed, as did what governments chose to fund and what artists would create given the emergence of the internet and new electronic media technologies at our disposal.

The “creative industries” is comprised of film, television, radio, music and the performing arts, publishing and the visual arts. It also embraces creative services such as advertising and marketing, architecture and design, software and all manner of digital content creation and application.<sup>8</sup>

1 Gallagher, S. (2019, 18 June). The fourth Industrial revolution emerges from AI and the Internet of Things. *Ars Technica*. <https://bit.ly/2XXREMB>

2 Lee, K. (2018, 28 August). How AI can save our humanity. *TED*. <https://youtu.be/ajGgd9Ld-Wc>

3 Walsh, T. (2018). *2062: The World That AI Made*. La Trobe University Press.

4 Schwarz, R. (2013, 25 November). 10 Creepy Examples of the Uncanny Valley. *Stranger Dimensions*. <https://www.strangerdimensions.com/2013/11/25/10-creepy-examples-uncanny-valley>

5 Hern, A. (2016, 19 October). Stephen Hawking: AI will be ‘either best or worst thing’ for humanity. *The Guardian*. <https://www.theguardian.com/science/2016/oct/19/stephen-hawking-ai-best-or-worst-thing-for-humanity-cambridge>

6 Walsh, T. (2018). Op. cit.

7 Department of Communication and the Arts. (1994). *Creative nation: Commonwealth cultural policy*. <https://trove.nla.gov.au/work/16860085>

8 Higgs, P., & Lennon, S. (2014). *Applying the NESTA Dynamic Mapping definition methodology to Australian classifications*. Brisbane: Queensland University of Technology. <https://eprints.qut.edu.au/92726>

AI technologies are increasingly in use in all facets of creative industries, including to create and curate content. Architects have been using intelligent design systems since the 1990s; EcoDesigner STAR<sup>9</sup> and depthmapX<sup>10</sup> simulate environments measuring the impact the built environment may have on movement and light at any time of any given year.<sup>11</sup> Brian Eno used intelligent systems as early as 1996 to create Generative Music 1,<sup>12</sup> a collection of compositions available on floppy-disk that included the “generative” software required to play his works. Now Australian digital artist, composer and filmmaker David Nerlich works with the latest AI apps that use neural networks “improvising chaotic forms and then selecting and refining what is magical from that chaos,” creating what he describes as “digital images that look like paintings.”<sup>13</sup>

Spotify’s 100 million subscribers,<sup>14</sup> meanwhile, are being monitored by algorithms whether they are aware of it or not. Listeners are served up with customised playlists constantly refined by observing and learning from our listening habits 24/7.

On the near horizon are AIs designed with emotional intelligence, what Rosalind Picard, director of the Affective Computing Research Group, MIT Media Lab, describes as “affective computing.”<sup>15</sup> The potential, Picard suggests, will be transformative, and it remains to be seen the impact this might have in the creative industries.

But will we get there? As news agencies replace journalists with AI news aggregators that source, authenticate and write stories to compete within 24/7 news cycles,<sup>16</sup> the climate emergency we are living through, I would argue, is transforming everything at a more rapid pace.

Can AI assist our efforts to adapt how we live in a radically transformed biosphere, or will our planet be so changed that few technologies will survive what Melbourne think tank, the Breakthrough National Centre for Climate Restoration, describes as

“a near- to mid-term existential threat to human civilisation” by 2050?<sup>17</sup>

## Crossing the uncanny valley

One promise is that AI and its associated technologies will, in performing increasingly sophisticated repetitive tasks, allow creatives more time to create. “Intelligent robots and AI solutions,” says Robert Berkeley, co-founder of cloud-based outsourcing service Express KCS, “are their most helpful when used to support human processes rather than take them over.”<sup>18</sup> While I am sceptical of the convenience vector inherent in Berkeley’s statement, which I will discuss later, what can creatives look forward to?

According to the last Australian census, 5.5% of the Australian workforce are in creative employment. Creative services amounts to three quarters of creative industries, growing jobs within the creative economy twice as fast as the rest of the Australian workforce.<sup>19</sup>

The highest income earners are software and digital content professionals; the lowest but fastest growing workforce can be found in music and the performing arts. While the visual arts saw the lowest income and a declining workforce, its mean income between 2011 and 2016 grew the fastest of the Australian workforce. These figures suggest opportunity, and if Kai-Fu Lee is correct, there will be plenty of roles within creative industries that will involve developing, refining and collaborating with machine learning technologies in the coming years.

But not everyone agrees with Lee’s optimism.

After being shown an AI-created animation of a zombie-like humanoid using its head as a leg, Hayao Miyazaki, the creator of internationally acclaimed anime films *Spirited Away* and *My Neighbour Totoro*, said:

Whoever creates this stuff has no idea what pain is whatsoever. I am utterly disgusted. If you really want to make creepy stuff you can go ahead and do it. [But] I would never wish to incorporate this technology into my work at all. I strongly feel that this is an insult to life itself.<sup>20</sup>

9 [https://www.graphisoft.com/archicad/ecodesigner\\_star](https://www.graphisoft.com/archicad/ecodesigner_star)

10 <https://varoudis.github.io/depthmapX>

11 Beqiri, R. (2016, 4 May). A.I. Architecture Intelligence. *Future Architecture*. <https://futurearchitectureplatform.org/news/28/ai-architecture-intelligence>

12 <https://www.discogs.com/Brian-Eno-Generative-Music-1/release/1452850>

13 [https://www.instagram.com/stoch\\_art](https://www.instagram.com/stoch_art)

14 <https://www.statista.com/statistics/244995/number-of-paying-spotify-subscribers>

15 <https://lexfridman.com/rosalind-picard>

16 Martin, N. (2019, 8 February). Did A Robot Write This? How AI Is Impacting Journalism. *Forbes*. <https://www.forbes.com/sites/nicolemartin1/2019/02/08/did-a-robot-write-this-how-ai-is-impacting-journalism>

17 Spratt, D., & Dunlop, I. (2019, May). *Existential climate-related security risk: A scenario approach*. Melbourne: Breakthrough – National Centre for Climate Restoration. [https://docs.wixstatic.com/ugd/148cbo\\_90dc2a2637f348edae45943a88dao4d4.pdf](https://docs.wixstatic.com/ugd/148cbo_90dc2a2637f348edae45943a88dao4d4.pdf)

18 Berkeley, R. (2017, 7 September). The Role of AI in Creative Industries. *IT Pro Portal*. <https://www.itproportal.com/features/the-role-of-ai-in-creative-industries>

19 Cunningham, S., & McCutcheon, M. (2018). Innovation driving Australia’s creative economy boom. *QUT*. <https://www.qut.edu.au/news?news-id=128711>

20 Humphries, M. (2016, 12 December). Studio Ghibli Founder ‘Utterly Disgusted’ By AI Animation. *PCMag*. <https://au.pcmag.com/software/45342/studio-ghibli-founder-utterly-disgusted-by-ai-animation>

The team from Japanese telecommunications and media company Dwango, who had worked on the AI model, were stunned at Miyazaki's response. Disappointed their idol had not embraced their efforts, they struggled to describe that their desire is to create images humans could not imagine, to also "make a machine that can draw like humans do." To that Miyazaki responded, "I feel like we are nearing to the end of times. We humans are losing faith in ourselves."<sup>21</sup>

Dwango's AI team had focused their skills on replacing our humanity, not on rediscovering it. Toby Walsh argues that the AI revolution "will be about rediscovering the things that make us human." By focusing on our social and emotional intelligence and our arts practices, Walsh concludes that "our *technological* future will not be about technology, but about our *humanity* [...] the jobs of the future are the most human ones."<sup>22</sup>

However, the Australian Digital Alliance's Elliott Bledsoe<sup>23</sup> reminds us that for all the repetitive tasks AI will free artists from, how a considerable number of artists will support themselves will be a challenge:

Income insecurity and housing affordability are realities for many artists. Artists' incomes are potentially jeopardised by new technologies. For example, many artists draw part of their income from non-arts sources and some of these non-arts income sources come from industries that may be displaced by AI and automation.

Digital artist Chris Rodley, also working with neural networks creating what he describes as "algorithmic horror", suggests that some of this displacement might be good:

What I think we're going to see with AI is perhaps a gradual erosion of this idea that artists have this absolutely unique insight that really puts them on this other plane from the rest of us.<sup>24</sup>

Author and futurist Arthur C. Clarke imagined an entirely different outcome. "The goal of the future," he said, "is full unemployment."<sup>25</sup> Clarke foresaw a fully automated future that digital economist and writer Nick Srnicek and sociologist Alex Williams argue is top of their list of minimum demands towards a post-capitalist world without work. Their demands include the reduction of the working week,

the provision of a basic income, and diminishment of the work ethic, a world where the latest technologies would "liberate humanity from the drudgery of work while simultaneously producing increasing amounts of wealth."<sup>26</sup>

While Walsh may agree with Srnicek and Williams, he argues for a re-imagining of the work ethic, one predisposed to persistent reinvention of ourselves, to lifelong learning:

Humans will instead need strong analytical skills. They will need emotional and social intelligence. And they will need all the other traits that make us human – creativity, resilience, determination and curiosity. These skills are what will keep us ahead of the machines.<sup>27</sup>

In the meantime, if Dwango's attempts to create a human that could learn how to walk using its head as a leg had failed, the developers behind FakeApp, DeepFaceLab, FaceSwap and MyFakeApp have successfully mimicked real people doing things they did not do nor say. By synthesising speech and fine-grained movement, anyone can be re-represented on video to say and/or do anything. Although there are considerable advantages for media makers, such as correcting an actor's dialogue in films and significant improvement in foreign language voice-dubbing, "deepfakes", as they are known, are problematic.

Veteran multidisciplinary artist David Nerlich (aka Stoch)<sup>28</sup> is concerned by AI's "ability to deceive us":

Deepfakes warn us we can no longer believe our eyes. It's often possible to spot fakes, but may be just as easy not to. Photography is increasingly less viable as evidence.

And yet satellite imagery comprised of billions of pixels can be analysed by an AI to interpret spectral bands evolving over time, determining the vegetation of any given area on Earth. Machine learning researcher and computer scientist François Petitjean teaches computers to recognise "whether the evolution of colours of a particular pixel corresponds to a gumtree forest or some grassland." Petitjean and his team have created a detailed vegetation map of Victoria, Australia, by understanding the complex information available within billions of pixels that comprise these pictures taken over time.<sup>29</sup>

21 <https://youtu.be/ngZok3lWKRC>

22 Walsh, T. (2018). Op. cit.

23 Interviewed for this report.

24 Reich, H. (2018, 1 September). Digital artist Chris Rodley says artificial intelligence could spell death of the artist. *ABC*. <https://www.abc.net.au/news/2018-09-01/artificial-intelligence-chris-rodley-on-changing-role-of-artist/10188746>

25 Youngblood, G. (1969, 25 April). Interview: A. C. Clarke author of '2001'. *Los Angeles Free Press*.

26 Srnicek, N., & Williams, A. (2015). *Inventing the Future: Postcapitalism and a World Without Work*. Verso Books.

27 Walsh, T. (2018). Op. cit.

28 Interviewed for this report.

29 Pelletier, C., Webb, G., & Petitjean, F. (2019). Temporal Convolutional Neural Network for the Classification of Satellite Image Time Series. *Remote Sensing*, 11(5). <https://doi.org/10.3390/rs11050523>



Vegetation, in particular, can be tracked like that because plants reflect infrared when they grow and are healthy – you can then track when things grow, how fast, maybe when they’re harvested and that tells you the type of vegetation that might be.

Petitjean’s map and the data drawn from the Victorian Land Use Information System he and his team utilised are both open data projects available for use under a mix of Creative Commons licences. While such data is available to all creative industries, Bledsoe is concerned that copyright enabled by technology “may have potentially negative impacts on artists”:

Digital rights management, automated scripts to issue notice and take-down requests and AI-based automatic copyright detection software are some of the types of technologies enabling assertion of copyright in the digital environment. While identifying and stopping infringements is important, the same technology can also be used to block legitimate uses of copyright material. Criticism and review has long been a fair dealing exception in Australian copyright law and, since the Copyright Amendment Act 2006, we have had a fair dealing exception for parody and satire. These and other exceptions create circumstances in which reuse of copyright protected material is legitimate without the permission of the copyright owner.

With the emergence of automated copyright infringement notices and “robo-takedown” requests, what Bledsoe describes as “the preferred cease and desist of the internet age”, no humans are reviewing these notices to verify their accuracy.

I have myself received a copyright notice from YouTube stating that “[c]opyrighted content was found in your video.” Fortunately, it also said that “[t]he claimant is allowing their content to be used in your YouTube video.” The music is my own composition used in a short film of my own making. The claimant turned out to be a third party collecting royalties on my behalf. But not all such scenarios turn out so well, as Bledsoe describes:

On the flip side, the volume of requests that ISPs [internet service providers] receive coupled with the time frame in which they must do something about them necessarily has prompted a move to streamline the removal of content identified in takedown requests (Google’s Trusted Copyright Removal Program, TCRP, is an example of

this in practice). This automation at both ends of the request’s life cycle means that no person is involved in any part of the decision-making process (i.e. what content to target with a take-down request and what content to remove as a result of a takedown request). [...] This can lead to a number of concerning situations where content filtering can lead to unsubstantiated copyright infringement claims, suppression of marginalised voices and political speech and unintended claims of copyright over material in the public domain.

What happens when such systems fail? When legitimate actors are caught up in, for example, Australia’s robo-debt crisis,<sup>30</sup> what Nerlich describes as “the veneer or perception of [impartiality and] autonomy attributable to automated debt collection agents” becomes evident. “Malicious policy makers,” he alleges, “are hiding behind the supposed impartiality of robots that make frequently inaccurate debt demands of welfare recipients”:

The makers and programmers are hiding behind these robo-agents they’ve designed, attempting to place responsibility for these decisions at arms length from themselves. The minister didn’t do it, the department staff didn’t do it, the robot did it. The AI did it. Perhaps even the notion that no one did it becomes permissible.

Self-described long-term optimist and open government geek Pia Andrews<sup>31</sup> proposes that AI may give artists a “novel way of exploring what it means to be or mirror being human. A way to explore what truly makes us human, and what augmented humanity could look like.” Andrews imagines “many ways both direct and philosophically that AI could inspire or enable new forms of art.”

We will no doubt find many opportunities as we skirt the uncanny valley, but the risks are evident there too. “All the worst human behaviours,” says Andrews, “if rewarded financially, become exponentially worse and harder to disrupt with AI.”

### The government’s response to AI

The Australian Government Department of Industry Innovation and Science is developing an ethics framework for AI in Australia.<sup>32</sup> The discussion paper

30 See the country report by Monique Mann, also on Australia, in this edition of GISWatch.

31 Interviewed for this report. Pia Andrews is executive director of Data, Insights and Transformation, Department of Customer Service, NSW Government.

32 <https://consult.industry.gov.au/strategic-policy/artificial-intelligence-ethics-framework>

it funded, *Artificial Intelligence: Australia's Ethics Framework*, distilled AI risks down to three issues:

1. *Data governance*: AI-enabled technologies rely on data. Lots of it. Where is this data drawn from, who owns it and how will it be used to develop AI?
2. *Using AI fairly*: How and where will AI be used? Will it be used fairly and will the public be aware of its use?
3. *Automated decisions*: Can we rely on AI to be totally autonomous? In what kind of scenarios would human decision making continue to be relied on?

The authors proposed an ethics plan identifying eight principles supporting the ethical use of AI and its development in Australia.<sup>33</sup> These are:

1. *Generates net-benefits*: The AI system must generate benefits for people that are greater than the costs.
2. *Do no harm*: Civilian AI systems must not be designed to harm or deceive people and should be implemented in ways that minimise any negative outcomes.
3. *Regulatory and legal compliance*: The AI system must comply with all relevant international and Australian local, state/territory and federal government obligations, regulations and laws.
4. *Privacy protection*: Any system, including AI systems, must ensure people's private data is protected and kept confidential plus prevent data breaches which could cause reputational, psychological, financial, professional or other types of harm.
5. *Fairness*: The development or use of the AI system must not result in unfair discrimination against individuals, communities or groups. This requires particular attention to ensure the "training data" is free from bias or characteristics which may cause the algorithm to behave unfairly.
6. *Transparency and explainability*: People must be informed when an algorithm is being used that impacts them and they should be provided with information about what information the algorithm uses to make decisions.
7. *Contestability*: When an algorithm impacts a person there must be an efficient process to

allow that person to challenge the use or output of the algorithm.

8. *Accountability*: People and organisations responsible for the creation and implementation of AI algorithms should be identifiable and accountable for the impacts of that algorithm, even if the impacts are unintended.

Public submissions to the national consultation closed on 31 May 2019. However, some state governments in Australia are developing their own AI governance approaches. Pia Andrews describes the outcome of user testing with representatives from the New South Wales government, pointing to the important factor of building public trust in technology:

We are also exploring how to normalise and make consistent explainable AI approaches, especially where citizens/customers should have line of sight to decision making about them. We have recognised that without explainability, you don't have accountability, appealability or traceability, and ultimately you will lose trust. We are exploring what the trust infrastructure of the 21st century looks like, which doesn't stop at AI or ML [machine learning], but extends to identity, and transparency of government service delivery.

## Conclusion

For all our concerns around intelligent systems gaining control over us, Rosalind Picard argues that we have a long way to go before any form of AI becomes self-aware, let alone able to comprehend who we are and how we differ from any of the tasks it will have been assigned to perform.<sup>34</sup> Google's AlphaGo had impressively beaten internationally renowned South Korean Go player Lee Sedol in four out of five games. Its algorithms were designed to predict probability, training itself in days, but at no time was it aware that it had been learning, let alone playing Go.<sup>35</sup> This is an important point.

Jaan Tallinn, co-founder of the Cambridge Centre for the Study of Existential Risk (CSER), is unimpressed with the narrow way in which AIs such as AlphaGo work. He is adamant that we need to program limits to what an AI can do. But if we teach an AI to adhere to human values, it is unlikely to know what a human is. So do we provide these protections

<sup>33</sup> Dawson, D., Schleiger, E., Horton, J., McLaughlin, J., Robinson, C., Quezada, G., Scowcroft, J., & Hajkovicz, S. (2019). *Artificial Intelligence: Australia's Ethics Framework*. Data61 CSIRO. [https://consult.industry.gov.au/strategic-policy/artificial-intelligence-ethics-framework/supporting\\_documents/ArtificialIntelligenceethicsframeworkdiscussionpaper.pdf](https://consult.industry.gov.au/strategic-policy/artificial-intelligence-ethics-framework/supporting_documents/ArtificialIntelligenceethicsframeworkdiscussionpaper.pdf)

<sup>34</sup> <https://lexfridman.com/rosalind-picard>

<sup>35</sup> Gibney, E. (2017, 18 October). Self-taught AI is best yet at strategy game Go. *Nature*. <https://www.nature.com/news/self-taught-ai-is-best-yet-at-strategy-game-go-1.22858>



anyway? “It’s a frontier,” says Nerlich, “and there is an unknown extent of undiscovered territory, and unknown possibilities for actors in that territory.”

Senior writer for *CreativeFuture*, Justin Sanders, in summarising his thoughts on how AI might impact copyright industries, quotes Thomas Edison: “Genius is 1% inspiration and 99% perspiration.” He asks, “What if machines could take the burden of some of that perspiration, leaving more room for inspiration?”<sup>36</sup> I would argue that it is the 99% that leads us to the mystical 1% genius.

Convenience does not lead to startling, life-changing innovations. It’s the hard work of getting there does. If all the effort were to be replaced by an augmented intelligence, if the journey is no longer part of the experience of arriving, how will we learn from all that it takes to reach our destination? A solution to a creative problem arrives through numerous processes. It takes effort. Yes, some repetitive processes can be replaced and we may well learn entirely unique ways of approaching our problems, but I would caution that we do not innovate ourselves out of a meaningful existence.

Picard reminds us that “there is a critical piece missing in AI. That critical piece is us, it’s humans. It’s human connection.”<sup>37</sup> As we skirt the uncanny valley, what kind of world do we want to create there? Will we survive the climate crisis and biomass collapse to know? Andrews offers the long-term optimistic view:

I think AI is both a threat and an opportunity for every industry, but also for society as a whole. It challenges a lot of 20th century and before paradigms, and we must take a little time to reflect on what sort of society, values and quality of life we want, if we are to have any hope of not reinventing the past with shiny new things. AI, machine learning and indeed emerging tech and social trends of all kinds are not new things to react to. They are all part of a broader paradigm shift that is moving us away from a centralised, secretive, analog and scarcity economy towards one that is highly distributed, open, digital and surplus. Every sector, every discipline, and indeed every human needs to consider how we want to live better, and then use this opportunity in time to build better futures. Then all emerging tech becomes used in the pursuit of something better, rather than the naïve

whack-a-mole game of trying to tackle an exponentially growing backlog with linear strategies.

## Action steps

While public submissions to Australia’s AI Ethics Framework closed in May,<sup>38</sup> we still need to ensure that the framework meets the expectations of public and professional concerns. To achieve this I would recommend:

- Considering the legal and ethical implications of AI within your arts practice. Be informed:
  - Participate in open dialogue with artists and researchers on moderated mailing lists such as YASMIN.<sup>39</sup>
  - Listen to informed discussion, research and interviews on podcasts like Lex Fridman’s Artificial Intelligence Podcast<sup>40</sup> and This Week in Machine Learning and AI.<sup>41</sup>
- A deep reading of the *Artificial Intelligence: Australia’s Ethics Framework* discussion paper.
- Developing an awareness of legislative proposals and technical options such as:
  - Elimination of bias in algorithms and machine learning tools.
  - Transparency in terms of public knowledge of what services are governed or augmented by AI.
  - Client-side AI functionality ensuring personal data never leaves one’s device.
- Participating in public awareness campaigns.
- Engaging with and lobbying local representatives.
- Supporting the work of advocacy groups such as Digital Rights Watch<sup>42</sup> and Electronic Frontiers Australia.<sup>43</sup>
- Supporting the work of computer science and machine learning researchers through organisations such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO), which hosts Australia’s premier science, technology and innovation event, Data61.

36 Sanders, J. (2018, 19 September). Can AI Be Creative? Here’s How Artificial Intelligence Might Impact the Core Copyright Industries. *CreativeFuture*. <https://creativefuture.org/ai-creativity>

37 Picard, R. (2018, 17 December). Why build AI? *TEDxBeaconStreet*. <https://youtu.be/itikdtdbeu>

38 <https://consult.industry.gov.au/strategic-policy/artificial-intelligence-ethics-framework>

39 YASMIN is a network of artists, scientists, engineers, theoreticians and institutions promoting collaboration in art, science and technology around the Mediterranean Rim and beyond. [https://ntlab.gr/mailman/listinfo/yasmin\\_discussions\\_ntlab.gr](https://ntlab.gr/mailman/listinfo/yasmin_discussions_ntlab.gr)

40 <https://lexfridman.com/ai>

41 <https://twimlai.com>

42 <https://digitalrightswatch.org.au>

43 <https://www.efa.org.au>

# Artificial intelligence: Human rights, social justice and development

Artificial intelligence (AI) is now receiving unprecedented global attention as it finds widespread practical application in multiple spheres of activity. But what are the human rights, social justice and development implications of AI when used in areas such as health, education and social services, or in building “smart cities”? How does algorithmic decision making impact on marginalised people and the poor?

This edition of Global Information Society Watch (GISWatch) provides a perspective from the global South on the application of AI to our everyday lives. It includes 40 country reports from countries as diverse as Benin, Argentina, India, Russia and Ukraine, as well as three regional reports. These are framed by eight thematic reports dealing with topics such as data governance, food sovereignty, AI in the workplace, and so-called “killer robots”.

While pointing to the positive use of AI to enable rights in ways that were not easily possible before, this edition of GISWatch highlights the real threats that we need to pay attention to if we are going to build an AI-embedded future that enables human dignity.

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