

Montréal Déclaration Activité Rapport

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Déclaration de Montréal
IA responsable_

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Introduction

On November 3, 2017, Université de Montréal (UdeM) and Fonds de recherche du Québec (FRQ) initiated the co-construction of the Montréal Declaration for a Responsible Development of Artificial Intelligence (hereafter “Declaration”). Over the course of a year, dozens of discussion events and deliberation workshops were organized in Montréal, Québec City and Paris with over 500 citizens, academic experts, entrepreneurs and professionals. The result of this reflection and consultation process, the Declaration, was unveiled on December 4, 2018.

It contains 10 ethical principles: well-being, autonomy, solidarity, equity, democracy, intimacy and privacy, inclusion of diversity, ecological sustainability, prudence and responsibility. It also identifies three major priority areas for an ethical digital transition: digital literacy, digital inclusion of diversity (EDI), and the environment.

An ecosystem of actors and partners gradually formed around the Declaration to bring it to life and disseminate it: the International Observatory on the Societal Impacts of Artificial Intelligence and the Digital (OBVIA) was created at the end of 2018 and the UdeM technosocial innovation centre, Inven_T, was set up in 2019 with the mission of hosting and managing the day-to-day affairs of the Declaration. In parallel, partners such as [Algora Lab](#), [The Institute for the Valorisation of Data \(IVADO\)](#) and [Mila – Quebec AI Institute](#) continue to develop co-construction and knowledge transfer projects related to the initiative.

Over the past four years, the Declaration has been visible through implementation initiatives, training, and outreach activities. It has also been cited and reviewed in scientific literature and discussed at numerous events. In addition, a number of other normative frameworks for responsible Artificial Intelligence (AI) have emerged since 2018, and the technologies they address continue to develop at a rapid pace.

This report provides an overview of the activities and initiatives that have resulted from the Declaration since its launch. This overview allows us to measure the Declaration’s impact, as well as the opportunities to take it even further in a highly evolving technological and societal context. As such, the report concludes with recommendations to ensure that the Declaration remains relevant and continues to inform and inspire local, national, and international community initiatives and conversations in the years to come.

The Montréal Declaration is a collective work, with 3 objectives:

1

To elaborate an ethical framework for the development and deployment of AI

2

To guide the digital transition so that everyone can benefit from this technological revolution

3

To open a space for national and international dialogue in order to collectively achieve inclusive, equitable and ecologically sustainable AI development

What is the Montréal Declaration?

Introduction

A UNIQUE PARTICIPATORY APPROACH		10
STAKEHOLDERS FROM ALL WALKS OF LIFE	A DOCUMENT AVAILABLE IN	ETHICAL PRINCIPLES
6	9	30+
	LANGUAGES	TRAINING AND AWARENESS RAISING ACTIVITIES ON RESPONSIBLE AI
REPORTS AND PRIORITIES FOR ACTION	A RICH ECOSYSTEM OF LOCAL AND INTERNATIONAL PARTNERS	
150+ MENTIONS IN THE LITERATURE AND IN INTERNATIONAL SCIENTIFIC CONFERENCES		300+ PRESS ARTICLES AND MEDIA MENTIONS
200+ SIGNATORY ORGANIZATIONS	2200+ CITIZEN SIGNATORIES	
30+ INITIATIVES USING THE DECLARATION OR INSPIRED BY ITS PRINCIPLES AND CO-CONSTRUCTION METHOD;		

The Declaration's Ecosystem

The Declaration is a collaborative initiative that relies on a variety of actors and stakeholders who participated in co-construction activities in 2017–2018 and bring the Declaration to life through various outreach and implementation initiatives.

The Declaration's Ecosystem



Influence

Over the past four years, the Declaration has reached far beyond academic circles and has been the subject of several media mentions.



Scientific Diplomacy and International Influence

The Declaration is sometimes used as a vehicle for scientific collaboration. In 2020, a multidisciplinary international group of AI researchers and experts met in Munich at the invitation of the Bavarian Research Alliance. Quebec's Chief Scientist, Rémi Quirion, presented the Declaration. These meetings led to a German translation of the document.

The Declaration is an international outreach tool used by the Quebec government to promote Quebec's unique and responsible approach in AI. It is regularly mentioned during public speeches by Quebec representatives abroad. Montréal International also promotes the Montréal AI ecosystem around the world by promoting its responsible approach to AI development¹.

Moreover, the Declaration has been used as a reference by leading international organizations, namely in the *Stratégie de la Francophonie numérique 2022–2026*². The document has also been hailed as a major achievement by the Organisation for Economic Cooperation and Development (OECD), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the European Council³.



On the Internet

The Declaration's website is its primary outreach platform. It contains the text of the Declaration in English, French, Spanish, Russian, Chinese, Italian, Portuguese and German. It also contains the various reports published at the time of the Declaration's launch.

Other venues are giving visibility to the Declaration on the Internet. In April 2022, Forum IA Québec launched an online Vitrine presenting the entire Quebec AI ecosystem. This platform has a section dedicated to AI governance, which mentions the Declaration⁴. As for Mila, the Institute publishes blog posts on its website, where the role of the Declaration in the projects developed by the research centre is regularly put forward.





In the Media

According to Meltwater, the Declaration was mentioned in nearly 300 news articles from January 2020 to December 2021, and on other hundreds of occasions since 2018. Internationally, it has been most talked about in French-language media and countries.

The general tone in the media is mostly positive. Noteworthy among the major coverage is the 2018 article in the prestigious *Nature* journal, which highlights the international interest of the Declaration and distinguishes it as one of the only initiatives based on a co-construction approach with a wide variety of stakeholders⁵.

Internationally, the Declaration is often mentioned when the responsible approach of Montréal's digital ecosystem is highlighted. For example, an article in *Sciences et Avenir*, a popular French news and science magazine, mentions Mila as a unique research centre where "AI must serve society, not the other way around", and whose commitment is reflected in the Declaration, which "lays the foundations of ethics in this field"⁶. Another article, published in the weekly newspaper *l'Express*, mentions the Declaration and highlights the responsible approach of Montréal's AI ecosystem as part of a feature on emigration to Canada⁷.

Conversely, some publications have taken a more critical tone, thus extending the public debate around the Declaration. For example, Olivier Schmouker, in *Les Affaires*, expresses doubts about the Declaration's ethical framework being respected by digital giants such as Google, and calls for stronger citizen consultation: "for AI to—at last—act in a beneficial way for our societies, there is no other possibility than to give the power to the people; and thus, to take it away, at least in large part, from those who have it today, that is to say researchers and GAFAs"⁸. This subject is certainly important and raises, among other things, the issue of the complementarity of ethical norms with those of a legal nature in order to properly frame the responsible development of AI.

The documentary "AI: To Be or Not to Be," directed by Matthieu Dugal and released in August 2022, outlines the content and goals of the Declaration, while asking how far AI industry players are willing to go to implement its ethical principles.

Finally, the Declaration was mentioned by a variety of media and institutional personalities, at the local and international levels, linking with the general public and extending the discussions with society, one of the Declaration's foremost goals.

The Declaration in the Scientific Community

Another key source of information for understanding the impact that the Declaration has had on its broader ecosystem since its launch is the scientific literature. The review conducted for this report allows us to note the scientific community's true interest in the Declaration.



In Scientific Literature

Throughout the fifty or so articles consulted, the Declaration is frequently commented on. It seems to stand out on several points:

- The Declaration is repeatedly cited for its welfare principle, which affects “all sentient beings”⁹ including animals, making it more progressive than other ethical charters¹⁰.
- Although not the only one to contain it, the document is praised for its sustainable development principle¹¹.
- The Declaration is singled out as one of the only ones to articulate notions of “democratic control, governance and political deliberation of AI systems” and one of the few guides that explicitly prohibit the imposition of lifestyles, or a conception of what it means to live a “good life”.¹²
- The Declaration is presented as one of the most cited and influential¹³.
- The Declaration is noted as one of the most participatory initiatives, in part because of its deliberative method that engaged the thoughts and voices of several hundred participants. Indeed, it is one of the few documents of its kind to include citizen voices¹⁴.
- The Declaration helps guide certain legislative developments to better frame AI.

The literature on the Declaration also contains several comments highlighting considerations and opportunities for the future:

- Some authors point to the homogeneity of the participants in the deliberative process leading to the Declaration. It would therefore be appropriate to continue to include even more diverse voices at the deliberative tables, such as Indigenous Peoples¹⁵. It would also be interesting to include more voices that are critical of, or even opposed to, AI, to ensure that a critical perspective on AI is maintained.¹⁶
- Other authors suggest that the Declaration's principles would benefit from being made explicit and contextualized, namely through specific tools, so that the greatest number of people can access and implement them¹⁷.



In Scientific Events

The Declaration has been featured in several major scientific conferences and events around the world. On the international scene, the Declaration has been the subject of scientific publications from renowned conferences, such as the *AAAI/ACM Conference on AI, Ethics, and Society*, the *ACM Conference on Fairness, Accountability, and Transparency*, the *Hawaii International Conference on System Sciences*, the *AAAI Conference on Artificial Intelligence*, *NeurIPS*, and the *International Conference on Artificial Intelligence and Law*.

Many of the Declaration's most active ambassadors have had the opportunity to promote the Declaration at conferences and scientific events, both locally and internationally. These conferences have been held in several countries, including Belgium, France, Germany, Italy, Japan, Morocco and the United States.

Locally, the Declaration was the subject of several presentations at the 87th and 88th annual conferences of the Association francophone pour le savoir (ACFAS), as well as at the international Time World Conference held in Montréal in May 2022.

This brief overview shows that the Declaration has made its way beyond the scientific boundaries of Quebec and Canada. The document is generally recognized for its participatory approach, which has earned it a certain "democratic seal" mentioned throughout the literature, and is among the most cited examples. However, the literature contains very few examples of concrete uses of the Declaration, which could mean that its potential as a basis for analysis and an operational framework could be further developed. This finding highlights potential areas for improvement in the future.



Education and Awareness

Public literacy on issues related to digital technologies is one of the Declaration's priorities. Various initiatives over the past few years have supported this citizen education effort, both within the academic community and with the general public, to raise awareness, educate, and improve literacy on the Declaration's principles and on responsible AI in general.



College and University Education

Several university-level courses citing or using the Declaration as teaching material have emerged in recent years. Most of these initiatives are local in scope, but some, through interuniversity partnerships or more open formats such as online MOOCs, have a broader reach. The following initiatives should be mentioned:

- **Ethics and Artificial Intelligence in Higher Education: For a Responsible Development of AI with and beyond the Montréal Declaration¹⁸** (Collège Rosemont, Agora Lab)

The project, which took place in 2020 and 2021, aimed to develop a toolkit on AI ethics and the Declaration with a target audience of all French and English high schools and colleges in Quebec. The project led to a host of awareness and deliberation activities in 200 Quebec institutions, and allowed some 30 teachers to be trained in AI ethics deliberation based on the Declaration.

- **«Les politiques internationales de l'IA» Summer School (Centre d'études et de recherches internationales de l'Université de Montréal [CÉRIUM])**

A summer school led by Marc-Antoine Dilhac in June 2019, which consisted of a doctoral seminar presenting the political issues of AI with an international perspective, with speakers from academia, but also from government bodies. The session was held in Paris.

- **«IA responsable - Santé durable et changement climatique» Summer School (OBVIA, Sorbonne Center for Artificial Intelligence (SCAI))**

A virtual summer school co-organized in 2021 by OBVIA and SCAI, bringing together researchers and students to participate in round tables and prospective writing workshops on the links between AI, sustainable health and climate change.

- At UdeM, the following courses mention and use the Declaration at different times:

→ [Gouvernance de l'intelligence artificielle \(POL 3930\)](#)

→ [Politique de l'intelligence artificielle \(POL 6121\)](#)

- At McGill University, the following course is offered, with one session dedicated entirely to the Declaration:

→ [Introduction to the Ethics of Autonomous Intelligent Systems \(ECSE 557\)](#). Taught by Professor AJung Moon, the course is restricted to undergraduate students in electrical and computer engineering.

- [The "Introduction à l'éthique de l'IA" MOOC \(CRÉ - UdeM\)](#)

This open-access course, designed by researcher Martin Gibert (CRÉ, IVADO) and launched in spring 2022, makes several references to the Declaration, in addition to using it as course material.

- [The international "Biais et discrimination en IA" training \(IVADO, UdeM\)](#)

This online course focuses on gender, race, and socioeconomic biases, as well as biases in data-driven prediction models leading to decisions. The Declaration is a major focus and takes up the major part of one module of the course¹⁹.

- [School of Artificial Intelligence in Healthcare \(SAIH\) Training](#)

Launched in 2018 by CHUM, the SAIH "is the first of its kind to focus on the development of human capacities and the implementation of AI in a real health environment²⁰". The training introduction cites the Declaration and mentions that CHUM is one of the signatories.

- [Responsible AI in Research Training \(Mila\)](#)

The AI for Humanity team is currently refining this program, called TRAIL (*Trustworthy and Responsible AI Learning certification program*), for Mila's research community. The program introduces the Declaration as an initiative embraced by Mila and recommends reading it.





Discussion and Awareness Workshops

Inven_T has been the main instigator of wide-ranging conferences aimed at raising awareness and debate around the issues of responsible AI and the Declaration. Here are some examples:

- In February 2020, Carl Mörch and Pauline Noiseau of Algora Lab led a session with HEC MBA students called **“Introduction to AI, AI Ethics and the Montréal Declaration for a Responsible Development of Artificial Intelligence”**.
- On February 16, 2021, Marc-Antoine Dilhac of Algora Lab and Alexandre Le Bouthillier (formerly of ImagIA), with the support of Gabrielle Veilleux-Verreault of OBVIA as moderator, held a **round-table discussion on the application of the Declaration’s principles** with 20 start-ups from the Datapreneur cohort, as part of the presentations organized by the UdeM Entrepreneurship Center (CEUM).
- Several UdeM **AI Meet-ups** were organized with Algora Lab, the CPU, and Inven_T support in 2021 and 2022, on a host of topics such as Environment and AI²¹, Predictive Justice and AI²², Education and AI²³, Mental Health and AI²⁴, Introduction and Sociopolitical Context²⁵, Democracy, Ethics and Social Networks²⁶, as well as AI and Feminism²⁷. The lectures were led by a multitude of experts from different institutions.
- **The LINK project**, led by Gabrielle Veilleux-Verreault and Bryn Williams-Jones (UdeM), is a soon-to-be-published illustrated book for the general public. It tells the story of a robot, LINK, trying to comply with the principles of the Declaration. This project, developed as part of OBVIA’s ‘ethics, governance and democracy’ research axis, aims to disseminate the Declaration outside the university walls and to popularize the principles contained in the Declaration.

Training courses focused on responsible AI issues have multiplied in recent years. Some of them mention the Declaration and sometimes devote an entire section of their programming to it. It appears, however, that students in technical fields, i.e., technicians or future technicians and practitioners of AI, are still very little aware of these issues during their university career. Discussions with stakeholders reveal that the topics of AI and its societal stakes remain remote for the general public. There is an opportunity here to make the Declaration an ambitious literacy and awareness vector.

Implementation of the Declaration

The Declaration has been used directly in initiatives to implement ethical principles in AI. Its content and participatory approach have inspired others.



Tools Developed from the Declaration

- [Guide to the principles of innovation and responsible artificial intelligence in health \(CHUM\)](#)

Launched in March 2022, this guide was developed by the CHUM in co-construction with over 60 collaborators, including experts, patient partners and innovators in the health sector. Intended for health innovators, the tool adapts the principles of the Declaration to this sector, and enhances them with an 11th principle, that of “knowledge generation and sharing”. The initiative consists of a self-assessment form and a guide with recommendations, tools and references for each of the principles that can serve as a compass and resource for innovators.

- [Reflexivity Grid on the Ethical Issues of AIS \(OBVIA\)](#)

In the fall of 2021, OBVIA released a reflexivity grid on the ethical issues of AIS²⁸ based on the principles of the Declaration. Aiming to educate and support professionals in the responsible use of AI technologies, the reflexive tool was developed iteratively with feedback from AI researchers, members of the Declaration’s editorial board, members associated with the Observatory, as well as practitioners. The grid, an exploratory project, continues to be refined with different groups.

- [Data Flow Factor Assessment Model \(OBVIA\)](#)

Law Professor Vincent Gautrais (UdeM) produced a Data Flow Factor Assessment Model in March 2022. This proposed model “intends to provide a framework for the protection of privacy, rights and freedoms in the development and use of artificial intelligence²⁹”. Produced in partnership with OBVIA, the final document does not explicitly quote the Declaration but takes up some of its principles while adding others, deemed more operationalizable: responsibility, social justification, transparency, security, explainability, accuracy and non-discrimination. Through this example, and others cited in this report, the need to reassess the relevance of some of the 2018 Declaration principles becomes apparent.

- [Mila’s and OBVIA’s Partnership Agreements](#)

Mila and OBVIA use the Declaration as part of the agreements they sign with their partners. Their respective partnership charters require each partner to commit to and be guided by the principles of the Declaration. The content of these agreements also largely reflects the spirit of the Declaration’s principles.

- **Responsible AI Institute Certification Program**

The Responsible AI Institute, a non-profit organization based in the United States, is currently working on one of the world's first responsible AI certification programs, which in this case is influenced by the standards and principles advocated by several documents, including the Declaration. The certification implementation framework, which is being piloted by the Standards Council of Canada³⁰, is guided in part by the Declaration and its principles, particularly with respect to transparency, fairness, notification and safety, as outlined in the institute's recently published white paper³¹.



Reports and Recommendations Inspired by the Declaration

The Declaration and its principles have been referenced in several sectoral reports with specific recommendations on responsible AI:

- The **Practical Recommendations for Responsible Use of Artificial Intelligence in Mental Health in the Context of a Pandemic**³², published by OBVIA in November 2020, aims to inform professionals, researchers, and entrepreneurs about responsible innovation issues using fictional cases and practical resources.
- The report **Artificial Intelligence, Insurance and Solidarity in Europe and Canada: a Roadmap for International Cooperation**³³, published in January 2020 by the Institute of Technology for Humanity in Montréal, in partnership with OBVIA. This initiative draws the potential portrait of responsible AI for the insurance sector, based on the principles of several ethical guides, including the Declaration.

- The report **Recommendations for the Responsible Use of Artificial Intelligence in Finance**³⁴, published by AMF in November 2021, is the result of two years of work carried out in collaboration with Marc-Antoine Dilhac and his team at Algora Lab, in partnership with OBVIA, CIRANO and Polytechnique Montréal. The report describes the specific ethical characteristics of the financial sector and makes recommendations based on the principles of the Declaration³⁵.

The deliberative methodology used by the Declaration has served as an inspiration to several international organizations, including:

- **UNESCO**, which decided to adapt the method, taking into account feminist critiques of deliberative democracy, to conduct its numerous citizen consultations for the draft version of its Recommendation on the Ethics of Artificial Intelligence. Commissioned to organize the deliberations internationally, Algora Lab and Mila collaborated in the development and execution of the "Inclusive Dialogue on AI Ethics" project³⁶, which ultimately allowed 611 individuals from 54 different countries to deliberate on the ethics of AI³⁷.



The Declaration as Seen by the Signatory Organizations

To enrich the picture of the Declaration's implementation initiatives, we consulted with signatory organizations through a short online questionnaire. The following section summarizes the key findings from this survey.

QUESTION

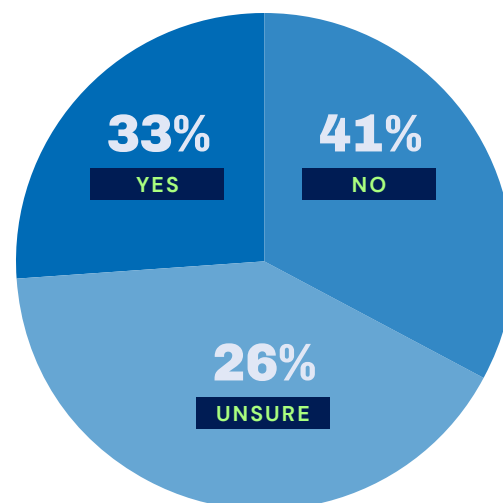
"What motivated you to sign the Montréal Declaration?"

Signing the document represents, for most signatories, a public testimony or reaffirmation of their commitment towards the responsible development of AI.

QUESTION

"Has your signing of the Montréal Declaration resulted in any changes in your organization?"

Only 33% of respondents said that their signing of the Declaration had resulted in changes within their organization, while 41% had not observed any changes. Respondents who answered "yes" mentioned positive changes as a result of signing in terms of awareness, changes in mindset, and even a greater proportion of reflections on these issues.



- **The Public Outreach Working Group** of the Government of Canada's AI Advisory Council undertook a consultative process with citizens across Canada, with a particular focus on youth and First Nations, called "Open Dialogue: Artificial Intelligence in Canada". Conducted in collaboration with CIFAR, Algora Lab and OBVIA, the virtual workshops conducted in 2021 informed the report submitted to the Minister of Innovation, Science and Industry in the same year³⁸.
- **The Islamic World Educational, Scientific and Cultural Organization (ICESCO)**³⁹, has initiated discussions with members of the team behind the Declaration and the "Inclusive Dialogue on AI Ethics" to conduct deliberative work within its territory to produce its own ethical charter.
- **The U7+ Alliance** published in 2020 *The Innovative University: Renewing the Role of Universities in the Digital Innovation and Artificial Intelligence Ecosystem*, a position paper on the place of the university in the digital ecosystem. This document, produced by researchers from UdeM and signed by 13 universities, cites the Declaration as a model for the new civic engagement that universities can make in AI⁴⁰.

Other initiatives mention or draw on the Declaration:

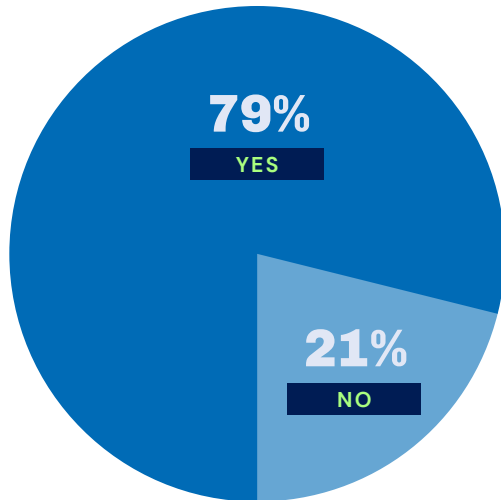
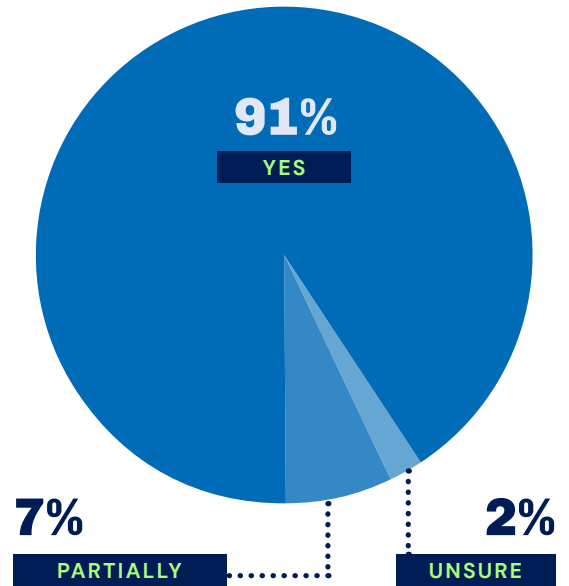
- The *OECD Council Recommendation on Artificial Intelligence*.
- The *Proposal for a Regulation establishing harmonized rules on artificial intelligence in the European Union* prepared by the European Group on Ethics in Science and New Technologies (EGESNT).
- The *Digital Data Charter*, adopted by the City of Montréal adopted in 2020, mentions the Declaration as an initiative already in place and to which the city adheres⁴¹.

QUESTION

“Do you feel the principles of the Declaration are still relevant today?”

Almost all of the organizations in the sample answered “Yes”, while none answered “No”, 7% answered “Partially” and 2% answered “Unsure”.

The principles are seen as universal and even more relevant today than when they were released in 2018. Others noted, however, that the principles could be updated, and pointed out that there had still been “no replication in legislation or ... in specialization processes”.



QUESTION

“Has your organization attempted to implement one or more of the Declaration’s principles?”

To this question, 79% of respondents answered “Yes”. The principles of respect for privacy and intimacy as well as sustainable development were the ones that stood out the most for respondents.

Some respondents expressed difficulty in implementing the principles of the Declaration, particularly in light of the pandemic and the tension between ethics and competitiveness. Others noted that “some of the principles in the Declaration are very high level and examples and strategies for implementation could be helpful”, while others, such as sustainability, are, by default, very difficult to achieve.



Overall, the Declaration seems to have raised awareness and triggered reflection among the signatory organizations. It seems to have formalized values and strengthened the position of some signatories on issues that they already considered important. With the rise of responsible AI tempering the enthusiasm for AI in society, the Declaration also seems to play a reputational role for organizations that understand that their adherence to the Declaration, in principle and eventually in practice, is key to their competitiveness. Finally, respondents suggest making the ethical principles even more concrete and operational.

In addition, various interviews with industry representatives and researchers involved in the issue of responsible AI have led to several findings:

- Montréal is banking on the distinctive “AI for Good” component as a trademark to attract digital companies. While the Declaration is rarely mentioned in discussions leading to industrial players settling in Montréal, the notions of EDI and sustainable development are gaining ground and occupying an increasingly important place in organizational concerns.
- There are tensions between a company’s internal organization and the ideal promoted by the Declaration’s principles. Companies face fierce competition and a market whose culture of exploitation and accumulation of personal data, in particular, is sometimes difficult to reconcile with a responsible AI approach. They will therefore be reluctant to implement ethical principles, such as those in the Declaration, unless there are effective incentives or legal guidance.
- There is, however, a strong demand from companies for support in responsible AI, through practical tools, use cases, or certifications.

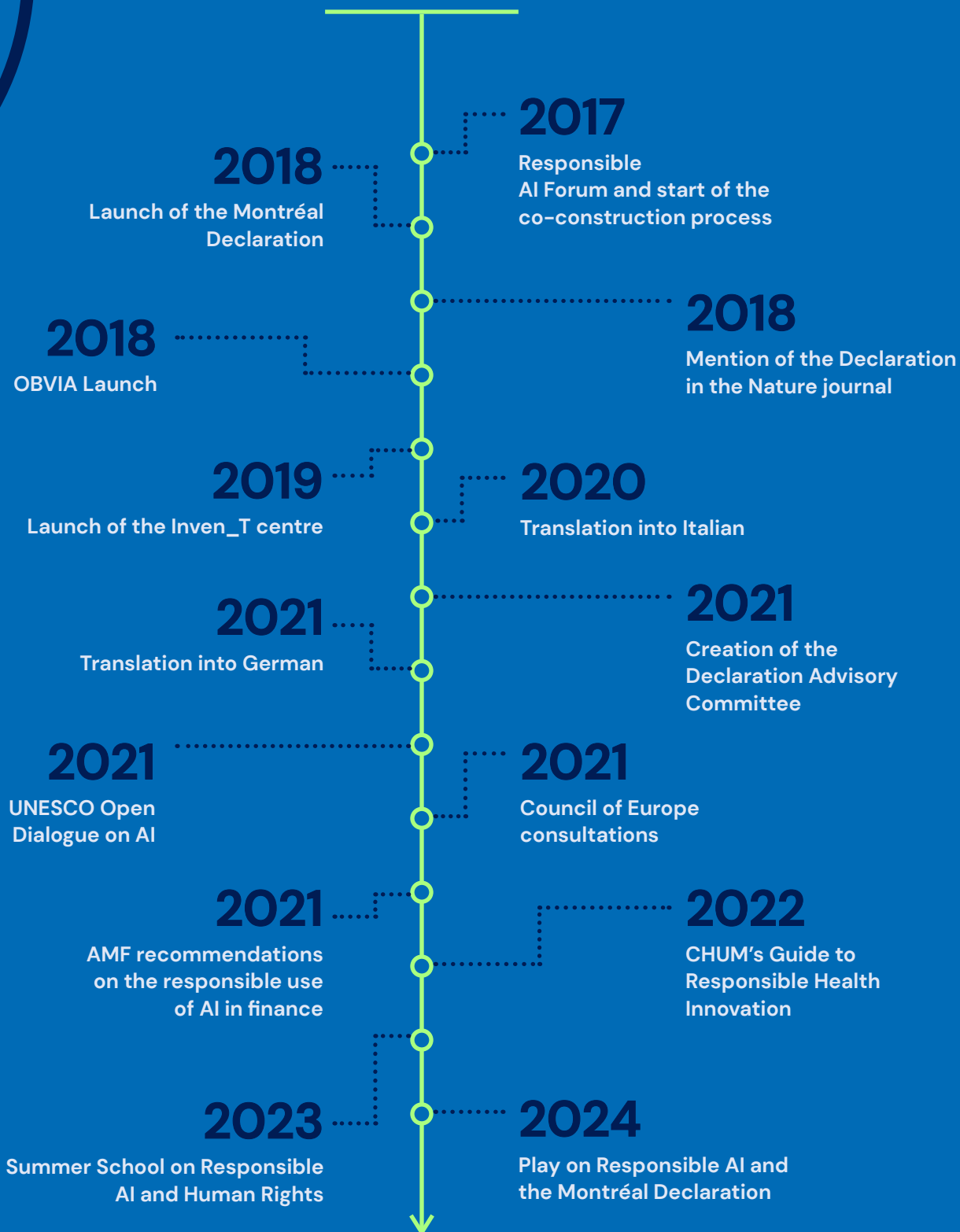
- Digital literacy is the preferred strategy. An informed society is able to define what is and isn’t socially acceptable when it comes to AI, which is a strong incentive for industry and governments to change.
- The culture within companies also plays a major role in the behaviours of company leaders and employees. Sensitized leaders and employees are likely to have thoughts consistent with responsible AI principles, engage in responsible behaviours in their roles, and influence decisions made regarding AI within companies.
- Responsible AI is not widely discussed within the machine learning communities. Therefore, AI practitioners and researchers seem to be prime targets for responsible AI literacy and awareness initiatives.

Through these different initiatives, word of the Declaration has spread over the last four years. The tools that help to implement its ethical principles are well received by the actors of the AI community, and the participatory method of the Declaration has been emulated by some influential international players. It is therefore relevant to continue and strengthen these initiatives of support and co-construction for the future of the Declaration.



The Montréal Declaration since 2017

Conclusion



Conclusion

This report is the first attempt in four years to step back and take stock of the Declaration and its ecosystem. In light of the initiatives and findings throughout this document, there appear to be a number of promising avenues to explore in order to evolve the Declaration, a document that is still relevant, and to realize its potential. Here are a few avenues to consider:

1 Continue and amplify the development of **practical tools** to facilitate the implementation of the Declaration, and develop mechanisms to **support** and monitor it. In this respect, it would be relevant to consider the creation of a committee of experts and citizens to receive questions from signatories concerning the implementation of the Declaration's principles. These practical cases could ultimately feed the reflection on the evolution of the Declaration.

2 Strengthen the **EDI** and sustainable development component of the Declaration, and pursue initiatives for **co-construction** and dialogue with the public. In addition, it would be relevant to launch research, training and development projects on the evolution of certain principles of the Declaration.

3 Develop training and initiatives to **strengthen literacy** on responsible AI and AI governance. These initiatives should address the general public as well as academics and policy makers. Original modalities of knowledge mobilisation and co-construction could be considered here.

4 Strengthen the links between the Declaration and the **normative ecosystem** – especially the legal one – at the local, national and international levels to work towards coherent and comprehensive standards for responsible AI.

In the meantime, the work around the Declaration continues. A summer school project on responsible AI and human rights, co-organized by UdeM and Mila, is planned for the summer of 2023. A play co-produced by UdeM, on the theme of societal issues related to AI and inspired by the principles of the Declaration, is also being prepared.

The Declaration remembers where it came from. Strongly rooted in citizen participation and co-construction with experts, all of the recommendations listed above, as well as any future initiatives that emerge from them, must ensure that the voice of citizens is included in an inclusive and diverse manner. The team behind the Declaration intends to continue the dialogue with members of its ecosystem and to strengthen its partnerships in order to further advance the development and adoption of responsible AI at the local, national and international levels.



References

- 1 <https://www.montrealinternational.com/fr/secteurs-cles/intelligence-artificielle/>
- 2 <https://www.cscience.ca/2022/03/21/la-francophonie-tourne-le-dos-a-la-face-obscur-de-lia/>
- 3 <https://www.cscience.ca/2020/12/07/la-declaration-de-lia-responsable-a-t-elle-creee-un-conscience-sociale/>
- 4 <https://ia.quebec/gouvernance>
- 5 <https://www.nature.com/articles/d41586-018-07730-1>
- 6 https://www.sciencesetavenir.fr/high-tech/intelligence-artificielle/a-montreal-dans-le-quartier-general-de-l-ia-ethique_140020
- 7 https://www.lexpress.fr/emploi/gestion-carriere/yoshua-bengio-le-pays-favorise-la-croissance-des-start-up_2153636.html
- 8 <https://www.lesaffaires.com/blogues/l-economie-en-version-corsee/la-declaration-de-montreal-non-le-cri-d-alarme-de-montreal/606875>
- 9 <https://www.declarationmontreal-iaresponsable.com/la-declaration>
- 10 e.g., Zeng, Lu and Huangfu, 2019; Floridi et al., 2018; Buruk, Elif Eckmeki et Arda, 2020; Thiebes, Lins et Sunyaev, 2021; etc.
- 11 Buruk, Elif Eckmeki and Arda, 2020; etc.
- 12 Hagendorff, 2020.
- 13 Floridi et al., 2018; Schiff et al., 2020; etc.
- 14 Schiff et al., 2020.
- 15 Daraz, Cheng, and Bouseh, 2022.
- 16 Noiseau et al. 2021.
- 17 Whittlestone et al., 2019; Schiff et al., 2020.
- 18 <https://algoralab.ca/fr/project/college-rosemont/>
- 19 <https://test-catalogue.edulib.org/fr/cours/BIASIFR/>
- 20 <https://eiaschum.ca/a-propos/>
- 21 <https://inven-t.umontreal.ca/activites/toutes-les-activites/activite/news/eventDetail/Event/les-rendez-vous-de-lia-environnement-et-ia/>
- 22 <https://inven-t.umontreal.ca/activites/toutes-les-activites/activite/news/eventDetail/Event/les-rendez-vous-de-lia-justice-predictive-et-ia/>
- 23 <https://inven-t.umontreal.ca/activites/toutes-les-activites/activite/news/eventDetail/Event/les-rendez-vous-de-lia-education-et-ia/>
- 24 <https://cpu.umontreal.ca/nouvelles/une-nouvelle/news/detail/News/les-rendez-vous-de-lia-de-luniversite-de-montreal/>
- 25 <https://inven-t.umontreal.ca/activites/toutes-les-activites/activite/news/eventDetail/Event/les-rendez-vous-de-lia-introduction-et-contexte-sociopolitique/>
- 26 <https://inven-t.umontreal.ca/activites/toutes-les-activites/activite/news/eventDetail/Event/les-rendez-vous-de-lia-democratie-ethique-et-reseaux-sociaux/>
- 27 <https://www.calendrier.umontreal.ca/detail/885474-les-rendez-vous-de-lia-de-ludem-ia-et-feminisme>
- 28 <https://www.docdroid.com/1j3dtAy/grille-reflexivite-enjeux-ethiques-sia-20211203-pdf>
- 29 <https://www.chairelrwilson.ca/actualites/2022/modele-devaluation-des-facteurs-relatifs-a-la-circulation-des-donnees/>
- 30 <https://www.responsible.ai/news/scc-launches-accreditation-pilot-for-ai-management-systems>
- 31 <https://www.responsible.ai/certification>
- 32 <https://www.docdroid.com/arOhXMf/recommandations-pratiques-pour-une-utilisation-responsable-de-lintelligence-artificielle-en-sante-mentale-en-contexte-de-pandemie-pdf>
- 33 <http://www.optictchnology.org/images/files/Rapport-Complet-IA-Solidarite-et-assurances-HTF-FR-compressed.pdf>
- 34 https://lautorite.qc.ca/fileadmin/lautorite/grand_public/publications/professionnels/rapport-intelligence-artificielle-finance-fr.pdf
- 35 <https://nouvelles.umontreal.ca/article/2022/01/26/l-amf-publie-un-rapport-pour-une-utilisation-responsable-de-l-ia-en-finance/>
- 36 https://opendialogueonai.com/wp-content/uploads/2020/08/RAPPORT_DialogueOnAIethics_ENG_v2.pdf
- 37 <https://opendialogueonai.com/fr/participantes/>
- 38 <https://www.canada.ca/fr/innovation-sciences-developpement-economique/nouvelles/2021/03/les-canadiens-sont-invites-a-participer-a-un-dialogue-ouvert-sur-lintelligence-artificielle.html>
- 39 <https://www.icesco.org/fr/>
- 40 https://nouvelles.umontreal.ca/fileadmin/user_upload/Archives_images/2020/06/U7_Report_Innovative_University_by_UMontreal_FINAL_June5-2020.pdf
- 41 https://laburbain.montreal.ca/sites/default/files/charte_donnees_numeriques_1_0.pdf

Bibliographic Appendix

Bibliographic appendix available online at the following [link](#).

