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Eleyan Sawafta, Zarif Masud, Yasmeen Abu-Laban, Syed Ishtiaque
Ahmed, Ebrahim Bagheri, Geoffrey Rockwell



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ELEYAN SAWAFTA, ZARIF MASUD, YASMEEN ABU-LABAN, SYED ISHTIAQUE AHMED, EBRAHIM BAGHERI, AND GEOFFREY ROCKWELL

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Abstract

In 2017, Canada became the first country to advance a national artificial intelligence (AI) strategy. In a now global race to adopt this technology, various stakeholders, including researchers and civil society organizations, have questioned its fairness in immigration, highlighting colonial legacies disguised as efficiency. These debates are particularly intense in the context of immigration decision-making due to the ethical and human rights implications, such as life-altering consequences for migrants and refugees. This article critically examines partisan discourse on AI and the immigration decisions on visa applications in Canada by analyzing parliamentary discussions. Specifically, extracting House of Commons Debates (Hansard) between 2014 and 2024, we analyze this data using Critical Discourse Analysis with the help of computational text analysis tools, including Voyant. We argue that while partisan differences exist in how AI is framed in Canada's legislative debates on immigration, these debates overall fail to systematically engage with the full range of ethical and human rights implications, and continuing colonial legacies, embedded in the concerns raised by many researchers and stakeholders about immigration and artificial intelligence. Beyond the main argument, we observe that although some parties, like the Conservative Party, engaged in criticism, their interventions resembled protest more than a policy response of a "government-in-waiting" prepared to govern.

Keywords: Partisan discourse, immigration, artificial intelligence, techno-optimism, techno-pessimism, Canada.

Résumé

En 2017, le Canada est devenu le premier pays à avoir élaborer une stratégie nationale en matière d'intelligence artificielle (IA). Dans une course désormais mondiale pour adopter cette technologie, divers acteurs, notamment des chercheurs et des organisations de la société civile, ont remis en question son équité dans le domaine de l'immigration, soulignant des héritages coloniaux dissimulés sous le couvert de l'efficacité. Ces débats sont particulièrement vifs dans le contexte de la prise de décision en matière d'immigration, en raison des implications éthiques et des droits humains, telles que les conséquences déterminantes pour la vie des migrants et des réfugiés. Cet article examine de manière critique le discours partisan sur l'IA et les décisions d'immigration concernant les demandes de visa au Canada, en analysant les discussions parlementaires. Plus précisément, en extrayant les Débats de la Chambre des communes (Hansard) entre 2014 et 2024, nous analysons ces données à l'aide de l'Analyse critique du discours, soutenue par des outils d'analyse textuelle computationnelle, y compris Voyant. Nous soutenons que, bien que des

différences partisanes existent dans la manière dont l'IA est présentée dans les débats législatifs canadiens sur l'immigration, ces débats ne parviennent pas, dans l'ensemble, à aborder de manière systématique l'ensemble des implications éthiques et des droits humains, ainsi que les héritages coloniaux persistants mis en lumière par de nombreux chercheurs et intervenants au sujet de l'immigration et de l'intelligence artificielle. Au-delà de l'argument principal, nous observons que, bien que certains partis, comme le Parti conservateur, aient formulé des critiques, leurs interventions s'apparentaient davantage à une forme de protestation qu'à une réponse politique d'un « gouvernément en attente » prêt à gouverner.

Mots-clés : discours partisan, immigration, intelligence artificielle, techno-optimisme, techno-pessimisme, Canada.



INTRODUCTION

The use of technologies in migration management is rapidly reshaping how states surveil and oversee the movement of people for temporary or permanent settlement (Broeders and Dijstelbloem 2016).¹ Although technologies such as artificial intelligence (AI) are often presented as tools to increase efficiency, scholars and advocates have warned that such technologies may jeopardize or sacrifice individuals' fundamental rights (particularly privacy) and increase the vulnerability of marginalized populations (Nalbandian 2022).

This discussion resonates with two opposing perspectives on technological governance: techno-optimism and techno-pessimism. Techno-optimism, as defined by Danaher (2022, 8), is “the stance that holds that technology plays a key role in ensuring that the good prevails over the bad.” Conversely, techno-pessimism is more about viewing that “the bad prevails over the good” (Prescott, as cited in Danaher 2022, 3). Danaher further argues that techno-optimism can only be intellectually defensible if it incorporates an agency-based perspective, acknowledging that humans possess the power to influence and shape technological outcomes.

Building on such debates around techno-optimism and techno-pessimism, the Canadian case vividly illustrates how these competing visions manifest in practice. Moreover, given that immigration has historically played a central role in Canada's evolution as a settler colony (Abu-Laban 2021; 2024), the introduction of AI into immigration management has the potential to reproduce and exacerbate systemic discrimination, and “transform migration into a site of potential criminality” (Molnar 2020, 34). AI in migration, therefore, must be understood not simply as techno-solutionism but as an arena of power and control, discretion, and contested inclusion—where optimism and pessimism collide and shape real-world outcomes.

Against this backdrop, this article asks: how have Canadian political parties represented in the House of Commons debated the role of AI and immigration

management between 2014 and 2024? Specifically, we treat and analyze this ten-year period as one dataset, without temporal or chronological variation, to assess how parties frame AI's implications for immigration management, ethics and human rights. We argue that debates as reflected in the Canadian House of Commons have largely failed to engage with the structural critiques raised by many scholars and civil society actors—especially concerns about racism, exclusion, and the reproduction of colonial logics in technologically mediated migration management. What stands out is that “[d]espite AI governance rising internationally,” there is no enforceable legislation[...] nor has the [Immigration and Refugee Protection Act] been amended to govern AI uses in the immigration context.” (Lehal 2025, 2).

In what follows, we proceed in two parts. First, we outline the ethical and human rights concerns associated with AI and immigration, both globally and within Canada, drawing on government reports, civil society publications, and scholarly literature. Second, following a discussion of methodology, we analyze partisan discourse in House of Commons debates, identifying key discourses around AI and immigration. Here, we move beyond policy design to examine techno-optimism and techno-pessimism as discursive strategies. The article shows that these stances resonate because they are embedded within each party's broader political identity and values. Yet, beyond rhetoric, we found no evidence of any party advancing concrete alternatives for the practical governance of technology or for mitigating its risks. Although some parties, like the Conservative Party, engaged in criticism, this alone does not amount to an adequate policy response. Their interventions resembled protest more than the posture of a “government-in-waiting” prepared to govern.

PART ONE: AI GOVERNANCE AND IMMIGRATION: THE ETHICAL AND HUMAN RIGHTS DIMENSIONS

Scholarship on AI governance has expanded rapidly in recent years, reflecting growing concerns over the technology's implications for human rights and social justice. Birkstedt et al. (2023, 133) define AI governance as “a system of rules, practices and processes” designed to ensure that AI aligns with legal, ethical, and strategic goals. Similarly, drawing on various literatures, Attard-Frost, Brandusescu, and Lyons (2024, 2) emphasize AI governance as a means to “maximize various types of beneficial impacts” while minimizing “harmful impacts.”

However, we situate these definitions within the lack of a “unified global regulatory regime” (Molnar 2020, 3) that has prompted calls for stronger oversight. For example, in 2023, United Nations High Commissioner for Human Rights Volker Türk described AI regulation as “one of the most pressing” challenges currently “faced by society, governments and the private sector” (United Nations, Office of the

United Nations High Commissioner for Human Rights 2023, para. 4). At the 2024 Group of Seven (G7) summit of economically powerful states—including Canada—the late Pope Francis urged leaders that AI must never dominate humanity (Reuters 2024). At its 2025 meeting in Alberta, Canada, the G7, in its statement, underscored AI for prosperity and the importance of “respecting human rights and privacy” (G7 2025, para. 6)

Despite these calls for caution, Canada’s inaugural Minister of AI and Digital Innovation, Evan Solomon, has voiced concerns that “other states will leapfrog ahead of [Canada] on a competitive advantage” in the field of AI (McLauchlan 2025, para. 13). At Toronto Tech Week, after the 2025 G7 meeting, he advocated for a “light, tight, [and] right” regulatory approach (Scott 2025, para. 8).

To expand on the foregoing discussion, Amnesty International (2024b) warns that digital border infrastructures often originate in security contexts and subject migrants to criminalization and surveillance, undermining their rights to asylum and mobility. Technologies in immigration that prioritize efficiency over fairness risk reinforcing what Abu-Laban, Tungohan, and Gabriel (2023) highlight as racial and gender exclusions owing to Canada’s settler-colonial foundation. This comes despite the celebration of “the expansion of rights to immigrant groups previously excluded from access to territory and citizenship” (Ellermann 2019, 2463) and has intensified in the wake of global developments, including the COVID-19 pandemic (Triandafyllidou and Yeoh 2023), rising populism (Pickup et al. 2023), and new technological transformations (Triandafyllidou et al. 2024).

In light of these dynamics identified in the literature and by human rights organizations, it is crucial to understand how technologies are deployed within Canada’s immigration system, and their results. By March 24, 2022, the federal department of Immigration, Refugees, and Citizenship Canada (IRCC) noted it had adopted various advanced data analytics systems to help manage immigration visa applications, aiming to improve processing speed and efficiency under the Liberal government (Immigration, Refugees and Citizenship Canada (IRCC) 2022c). However, as we will elaborate further, there is ongoing debate about whether these systems incorporate AI in a strict sense, and considerable concern persists regarding bias and human rights risks in decision-making processes (Amnesty International 2018).

One of the most controversial technological developments in visa application tools within Canadian immigration management is a system called Chinook. According to IRCC, Chinook is an Excel-based tool developed in 2018 and launched in 2019 to increase the efficiency in processing temporary resident applications, such as study permits (IRCC 2022a).

Ostensibly, in December 2020, IRCC documented that after using Chinook there was an 18-30% gain in efficiency in overseas offices because officers were

supported to process hundreds of applications simultaneously through modular spreadsheets (IRCC 2022a). Thus, for the Liberal government, Chinook reflects an outcome that warrants techno-optimism, or in other words, a source of hope that is promising for governance (Avle et al. 2020). This optimism celebrates speed and administrative modernization and techno-solutionism. However, in sharp contrast, critics highlight Chinook’s “shady and opaque” coding practices and “black-boxing problem,” which serve to blur “lines of accountability” (Chartier-Edwards et al. 2024, 765-71).

Interestingly, IRCC insists that Chinook merely displays data and does not employ artificial intelligence (IRCC 2022a). Others, like Canadian immigration lawyer Will Tao (2022a), argue that Chinook is AI. Numerous critics, such as Steinman and Barandereka (2023), Tao (2022a, 2022b), and Ziaie (2021), highlight concerns about fairness when technologies such as Chinook are implemented in the immigration sector. Such a critical analysis of Chinook aligns with broader critiques by Karas and Goel (2023), who stress the concerns of transparency and accountability in Canada’s adoption of AI-based technologies for immigration. Moreover, as the federal government itself acknowledges, several federal court rulings have linked Chinook to AI (IRCC 2024). In combination, this leads us to stress the legal claim that Chinook is AI and to critically question the government’s lack of transparency regarding Chinook, irrespective of the government’s denial that Chinook represents an AI system.

It is important to note that some official evidence shows that such tools are not neutral in Canada. For instance, the report of the Standing Committee on Citizenship and Immigration highlights significant disparities in approval rates from Chinook across different applicant groups, leading the committee chaired by Liberal MP Salma Zahid to recommend an “[i]ndependent [a]ssessment of Chinook, [e]-tools and [a]rtificial [i]ntelligence” (Parliament, House of Commons, Standing Committee on Citizenship and Immigration 2022a, 49). Additionally, on study permits, the same report reveals that “in 2021, 72% of students applying from African countries with significant French[-speaking] populations were rejected [...] similarly, visa officers rejected 68% of students applying from African countries with significant English[-speaking] populations” (Parliament, House of Commons, Standing Committee on Citizenship and Immigration 2022a, 23). Based on 2021 IRCC data, the approval rate of study permits for applicants from countries such as Afghanistan (10%) and Somalia (14%) was significantly lower compared to countries such as Germany (96%) and Denmark (99%) (IRCC 2022b). In 2022, the AI and Law Chair at the University of Calgary, Gideon Christian, argued before the Standing Committee on Citizenship and Immigration, that “racist AI [is] making immigration decisions” and that “any use of AI technology by IRCC should be subject to external scrutiny” (Parliament, House of Commons, Standing Committee on Citizenship and Immigration 2022b, 3).

Rapid developments and documented patterns of bias and exclusion in tools like Chinook underscore the urgent need to continually examine Canada's broader AI governance landscape. The overall governance of AI in Canada, along with its associated policy responses, is thoroughly examined in 84 initiatives in Canada by Attard-Frost et al. (2024) and found wanting. While Canada was the first country to implement a national AI strategy in 2017, suggesting commitment to AI governance, they find that there is "little focus on developing ethics statements or standards," underscoring a critical gap between techno-optimism and ethical oversight (Attard-Frost et al. 2024, 1).

One of the main legislative attempts to regulate AI in Canada was the Artificial Intelligence and Data Act (AIDA), introduced as a part of Bill C-27 in 2022, officially known as the Digital Charter Implementation Act (Innovation, Science and Economic Development Canada 2023). AIDA sought to ensure the non-discriminatory and responsible deployment of AI (Innovation, Science and Economic Development Canada 2024). It went through second reading in April 2023 and was still being considered by committee in the House of Commons when Parliament was prorogued following Prime Minister Justin Trudeau's resignation in January 2025, effectively terminating AIDA (Arai 2025). The Carney Liberal government has no plans for resurrecting AIDA but instead "are considering which aspects of AIDA to carry forward as they develop an updated regulatory framework for AI" (Scott 2025, para. 7).

Building upon the above, AIDA, as scholars like Attard-Frost (2025, para. 3) note, "will be remembered by many as a national AI legislation failure, and in its absence, the future of Canadian AI regulation is now uncertain." Although AIDA died (Castaldo 2025), it is telling to observe that Amnesty International Canada's 2024 review of proposed changes contained in AIDA found inadequacies leading them to reject inclusion of AIDA in Bill C-27. As they put it: "Amnesty International Canada believes that Canada's proposed AIDA is failing in its primary responsibility to protect human rights in the face of recent developments in AI" (Amnesty International Canada 2024a, 1). This overlaps with Attard-Frost's observation (2023, para 15-30) of the many "[o]pen letters and petitions from groups concerned that AIDA fails to protect human rights, privacy," and that such "top-down AI governance regimes of state and industry power often fail to serve the interests of marginalized communities." Amnesty International Canada (2024a) advocates instead for meaningful transparency, and effective accountability mechanisms, which include imposing non-administrative penalties and authorizing individual remedies for harm or rights violations, providing for periodic parliamentary reviews, and establishing simplified rights and remedies for individuals impacted by AI systems.

Another critical aspect of AI regulation concerns the oversight of technologies, such as AI, in immigration, particularly in the management of visa applications.

Various approaches have been proposed, including the human-in-the-loop (HITL) model and Ethics-by-Design (EbD) framework. HITL approaches integrate human involvement into AI-driven decision-making to mitigate risks (Agudo et al. 2024). While proponents claim that such oversight enhances “accuracy, objectivity, and consistency” (Green 2022, 2), in practice it often fails because humans are poorly positioned to intervene meaningfully at a critical stage, especially when there is an “emergency situation at the last minute” (Elish 2019, 50).

In immigration systems, if an AI system scores visa applications, but a human officer must review and approve each decision before it is finalized, that is a HITL system. To elaborate, in Canada’s Chinook, the presence of risk flags and automated refusal templates illustrates how HITL can potentially transform oversight into mere ritual, enabling what some scholars cite as “automation complacency” and “responsibility gaps” (Cornelissen et al. 2022, 2) that may ultimately reinforce settler-colonial logics of racialized exclusion.

EbD aims “to incorporate ethical principles into the development process, allowing that ethical issues are addressed as early as possible and followed up closely during research activities” (European Commission 2021, 3). Principles like freedom, privacy, fairness and even well-being, along with transparency and accountability, are directly embedded into systems architecture from outset (Brey and Dainow 2023). In other words, EbD integrates ethical principles from the earliest stages to prevent problems rather than fixing them later to ensure continuous monitoring of ethical issues (European Commission 2021). Essentially, it entails building AI systems that respect autonomy and human dignity, ensure data privacy and non-discrimination, prevent harm, maximize transparency, and maintain human oversight and accountability throughout their lifecycle (European Commission 2021). Applied to immigration, it might involve creating an AI visa screening system which avoids using biased training data from the outset, ensuring explainability of decisions, and including auditability features, regardless of whether a human is involved in the final step.

While promising, EbD applications face practical challenges such as “how ethics can be effectively embedded” (Nussbaumer et al. 2021, 37). Nevertheless, EbD offers a more sustainable approach to AI governance, shifting from reactive human oversight to proactive ethical system design, and thereby potentially addressing bias and injustice at their source rather than as an afterthought. Indeed Steven Meurrens (2022, as cited in Parliament, House of Commons, the Standing Committee on Citizenship and Immigration 2022b, 2), a Vancouver-based Canadian immigration lawyer, told the House of Commons that ongoing parliamentary “insight and oversight” is needed to ensure that Immigration, Refugees and Citizenship Canada “publish information that reflects what is actually happening rather than what the government’s or the department’s goals are.”

Given the wide-ranging issues raised by scholars and stakeholders about AI and immigration, as well as the uneven nature of official (governmental) information on specific technologies in immigration management, it becomes relevant to look at the wider political system. In this regard, examining partisan discourse on AI and immigration in Canada becomes crucial.

PART TWO: RESEARCH METHODS, ANALYSIS, AND FINDINGS

Our inquiry is inductive, emerging from initial observations suggesting that the Liberal Party tends to adopt a techno-optimist stance, evident in initiatives like Canada's Digital Ambition 2023-24 (Treasury Board of Canada 2025). We were open to discovering a range of discourses across party lines. Our research question concerning how political parties discuss immigration and artificial intelligence stems from a gap in consideration of how issues like racial bias, accountability gaps, and the erosion of human rights protections are addressed in formal politics, like parliaments. As key mediators between state institutions and the public or societal interests, parliamentary actors play a vital role in framing technological adoption. Thus, by analyzing parliamentary speeches, this research seeks to investigate how Canadian political parties discuss, frame, and contest the use of AI and immigration management, rather than starting with a fixed and testable hypothesis about partisan differences.

DATA COLLECTION

The Canadian Hansard (transcripts of parliamentary debates) for The House of Commons is available online at ourcommons.ca.² The Linked Parliamentary Data Project (LiPaD) (Beelen et al. 2017) is another prominent dataset of the debates, published for research purposes with high quality data, but is limited by the fact it only includes data up to 2019. The LiPaD project credits openparliament.ca,³ a freely available, searchable online database of the parliamentary debates run independently by Michael Mulley.⁴ We used the data provided by Mulley for practical purposes instead of ourcommons.ca or LiPaD. This dataset contains additional metadata that is useful for our analysis. We verified the quality and accuracy of the provided dataset manually by randomly sampling speeches and verifying against ourcommons.ca.

We collected a total of 386,152 speeches from January 2014 to December 2024 from OpenParliament.ca. In addition to the actual text for each speech, we also preserved the speaker's name, party, riding, language (English or French), date, topic, subtopic, and URL for analysis.

While an event-focused approach (e.g., analyzing debates during specific moments, events or crises) can provide in-depth insight into party positions during

critical temporal junctures, we intentionally adopt a longitudinal design covering 2014-2024. This broader scope enables us to understand whether party positions reflect consistent patterns of discourse or whether they are primarily reactive to crises.

DATA FILTERING

From the larger corpus of 386,152 speeches, we focused on identifying only those speeches relevant to our inquiry. To do this, we developed a lexical framework consisting of a set of concepts related to our research topic (e.g., “AI and immigration,” “AI and human rights,” etc.).⁵ We designed an extraction rule for each of these concepts. The extraction rules employed case-insensitive, exact string matching with Boolean operators (AND, OR) to filter subsets of data. For example, to find speeches related to “AI and immigration,” we identified all speeches where both “AI” and “immigration” are mentioned by using the Boolean operator “AND.” Hence, the extraction rule was written as “AI” AND “immigration.”

DATA PREPARATION AND METHODOLOGY

The filtered speeches were organized into three analytical notebooks: AI and immigration, AI and human rights, and AI and ethics.⁶ Each notebook grouped speeches by party (and subsequently by year), containing distinct documents—one for each political party represented in the House of Commons during this period (the Liberal Party, the Conservative Party, the New Democratic Party, the Bloc Québécois, and the Green Party). The three notebooks allowed for a structured comparison that highlights key narratives across party lines while also accounting for similarities and contradictions in party discourse and framing.

We performed our data analysis in the notebooks using Voyant (voyant-tools.org), a web-based computational text analysis tool.⁷ Voyant facilitated multiple analytical techniques, including topic modelling, the identification of distinctive words for each party using term frequency-inverse document frequency (TF-IDF), a statistical measure used to evaluate how important a word is to a document in a collection by downweighting common terms and emphasizing unique ones (see Jain 2024), collocate analysis (examining words found in proximity to each keyword (Sinclair and Rockwell 2025) and measuring document length).

To read the collocates, and since we examine how political parties represent and use language when debating the use of AI and immigration, we adopted Critical Discourse Analysis (CDA). Other studies have employed this analytical approach in the context of parliamentary debates (see Kronick and Rousseau 2015). Following

Blommaert and Bulcaen (2000, 448), using CDA helps us to state that discourse “is socially constitutive as well as socially conditioned” with CDA making more visible the ways in which discourse is embedded in power.

In this study, we understand discourse as a structured mode of speaking that constructs and legitimizes social realities (Fairclough 1992; Foucault 1972; Kronick and Rousseau 2015). Operationally, we define discourses through recurring thematic patterns, key lexical choices, and argumentative framings within parliamentary speeches. Discourse here refers to structured ways of talking that shape understandings of policy, identity, and governance.

Below, we first present descriptive trends in AI mentions between 2014 and 2024 to contextualize overall parliamentary attention. We then compare party-specific rhetoric, focusing on how AI and immigration is framed (e.g., techno-optimism, techno-pessimism).

ANALYSIS AND DISCUSSION

As depicted in Figure 1, our analysis revealed a notable increase in references to “artificial intelligence” and “AI” in Canadian political party speeches, particularly after 2017, when the Liberal government introduced the Pan-Canadian AI Strategy.

In such discussion, parties frequently reference “technology” in the context of immigration but rarely use other terms such as “advanced digital technologies.” In

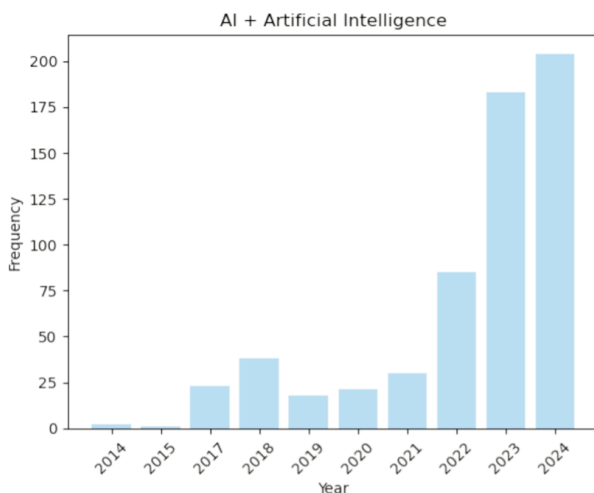


Figure 1. Frequency of AI-related speeches in the House of Commons (2014–2024). Note: the authors generated this figure from the Parliamentary speeches by using Python.

fact, a keyword search for “advanced digital technologies” AND “immigration” produced no results, while “technology” AND “immigration” yielded 251 instances, and “AI” AND “immigration” returned only 28 results. This result suggests that Canadian political parties discuss immigration-related technological issues in broad, often vague terms, primarily using the general word “technology” rather than more precise terminology like “advanced digital technologies” or “AI.” The limited use of specific terms indicates a lack of technical precision and perhaps a limited depth of engagement with the complexities and implications of emerging technologies in immigration management. Such trends are further interpreted in the party-based analysis section.

We begin with the Liberal Party, as it held power during most of the studied period and thus most significantly shaped discussions. We then move to the Conservative Party as the Official Opposition, followed by parties with official status—the New Democratic Party and the Bloc Québécois—and lastly the Green Party. Within each party section, we discuss overarching discourse themes, examine key terms and distinctive keywords (identified through TF-IDF analysis), and illustrate them with selected excerpts. Excerpts were selected to ensure diversity in topics, years, and speakers, aiming to reflect a broad range of parliamentary discourse.

The discourse of Canadian political parties reveals stark partisan disparities in both engagement and framing. Table 1 outlines the key themes that guide our analysis of party discourse and their implications for AI and immigration.

THE LIBERAL PARTY AND TECHNO-OPTIMISM

The Liberal Party referenced AI more frequently than other political parties (see Figure 2). It also led discussions on AI and immigration with 24,802 words, followed by the Conservative Party with 8,417 words. As Bäck et al. (2019) emphasize, ruling parties often dominate legislative debates due to their agenda-setting power. In a multiparty system, the official opposition plays the leading role among opposition parties in the legislature.

The Liberal Party has primarily framed its discourse on AI and immigration around themes of modernization and efficiency. Its distinctive words (measured by TF-IDF) include “research,” “science,” “researchers,” and “scientists,” reflecting a pro-research and development policy framework that positions AI as a catalyst for scientific innovation and national progress. This focus further underscores AI’s perceived role in fostering economic growth and techno-solutionism.

On the aforementioned technocratic framing, Marie-France Lalonde, the then Liberal Parliamentary Secretary to the Minister of Immigration, emphasized that Immigration, Refugees, and Citizenship Canada (IRCC) employs AI in immigration

TABLE 1. Major partisan perspectives on AI and immigration and their influence on immigration management. Source: Based on the authors' analysis

Political Party	Perspective	How It Affects AI and Immigration Discourse
<i>Liberal</i>	Techno-optimist: viewing AI as scientific innovation, national progress, and a governance (or modernization) tool	AI is framed as a driver of innovation and modernization, with privacy, bias, and surveillance concerns treated as secondary. This aligns with Danaher (2022, 8) that “the good prevails over the bad”
<i>Conservative</i>	Techno-pessimist: framing AI as a privacy risk and surveillance threat	AI should not infringe on privacy or individual freedoms; national security risks must be managed. This aligns with Prescott (as cited in Danaher 2022, 3) that “the bad prevails over the good”
<i>NDP</i>	Skepticism and cautious about human rights issues	AI should not reinforce inequalities; it needs ethical regulation
<i>Bloc Québécois</i>	Neutral but still critical: AI needs strong privacy protections and sensitivity to the context of Quebec	AI regulation, such as Bill C-27 should not prioritize industry over citizen protections or public services. Also, AI was discussed within the context of Quebec’s autonomy and international human rights
<i>Green</i>	Largely quiet	No direct influence on AI and immigration management discussions in the House of Commons

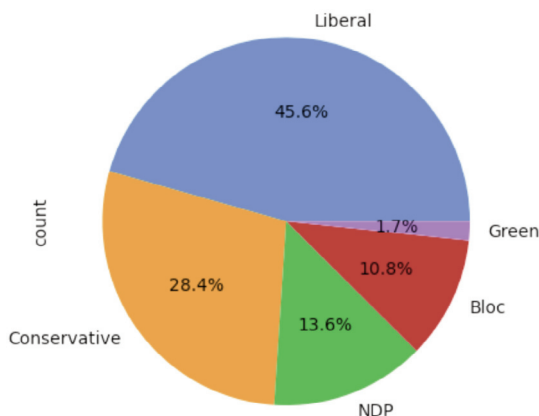


Figure 2. AI mentions by different parties (2014–2024). Note: the authors generated this figure from the Parliamentary speeches by using Python.

“to triage client enquiries and to identify routine and straightforward applications,” while ensuring that “the automated tools never refuse or recommend refusing applications” (House of Commons Debates 2023a, 16001). This framing also aligns with the Liberal government’s broader digital transformation agenda, specifically Canada’s Digital Ambition 2023-24 that centres on providing secure and modern digital services and maximizing effectiveness (Treasury Board of Canada 2025).

Earlier Liberal statements similarly conveyed this spirit of techno-optimism. Bill Morneau, the Liberal Minister of Finance, described AI’s transformative potential across industries as a reality that “we cannot ignore” (House of Commons Debates 2017a, 10700). Ruby Sahota, the Liberal MP for Brampton North, also expressed excitement, noting that: “budget 2017 has announcements about AI” and framing these as “jobs of the future” as well as “jobs of today” (House of Commons Debates 2017b, 10170). This rhetoric reflects a broader Liberal narrative that frames AI as a force of progress.

Regarding discussions about AI and ethics, Francesco Sorbara, the then Liberal MP for Vaughan—Woodbridge, Ontario, underscored the importance of having a General Data Protection Regulation, such as the proposed, now defunct, AIDA (House of Commons Debates 2022a). Sorbara argued that such data protection measures are essential to ensuring the “responsible use of AI” (House of Commons Debates 2023a, 10094). His enthusiasm for technology was also evidenced when he stated:

Canadians are also optimistic about the future benefits of AI. For example, a recent study by Nanos Research on behalf of Innovation, Science and Economic Development Canada shows that Canadians are almost seven times more likely to say that the impact of AI will be very positive rather than very unfavourable. However, stakeholders have also expressed a range of concerns regarding AI and automated decision-making systems (House of Commons Debates 2022a, 20094).

While some Liberal interventions acknowledge privacy concerns, they do not systematically and consistently address how AI may reinforce racialized exclusions within immigration management, and they tend to focus primarily on regulatory mechanisms such as AIDA, as a safeguard against AI risks.

The Liberal Party generally supports AI regulation but has faced criticism for inconsistencies in its implementation. Rob Oliphant, the Parliamentary Secretary to the Minister of Foreign Affairs, mentioned AI’s ethical risks, yet expressed optimism about its potential, asking: “Is there [...] a way we can get this right, to use AI for good as well as making sure it is governed well?” (House of Commons Debates 2023b, 13218). His statement reflects a desire to balance innovation with ethical considerations.

While no data were extracted in 2025, as noted, the new Liberal government under Mark Carney publicly acknowledged that it is no longer interested in AIDA as

a holistic act (see Scott 2025). Beyond the developments of 2025, the Conservative Party, as we will show, has already argued that Liberal policies tend to prioritize efficiency over privacy.

THE CONSERVATIVE PARTY AND TECHNO-PESSIMISM

Some Conservative members have acted as vocal critics of AI technologies in immigration, particularly regarding transparency and oversight. For example, the Conservative party's distinctive words (measured by TF-IDF) include “Canadians,” “privacy,” “gatekeepers,” and “legislation.”

One way that the gatekeeper theme showed up was in positioning the Conservatives as more open to immigration than the Liberals. Conservative MP Stephanie Kusie (House of Commons Debates 2023c, 13933), representing Calgary Midnapore, stated: “the official opposition’s desire to get rid of the gatekeepers is our unique idea to bring home doctors and nurses.” Similarly, Glen Motz, a Conservative MP representing Medicine Hat—Cardston—Warner in Alberta, highlighted the party’s pro-immigration stance, noting that:

There was higher immigration under Conservative governments, after Liberal governments’ cuts in levels. In 1993, immigration levels reached a peak and then were severely cut for many years thereafter. Under Conservative governments, we saw a higher level of immigration. For example, the average level under Conservative governments from 1993 to 2015 was 257,830. By contrast, Liberal governments averaged only 220,000 in the same time frame when in government. There were 20% more immigrants admitted under Conservatives than past Liberal governments. Over 10 years of Conservative government, we admitted 2,579,494 people. By contrast, the Liberals over a 10-year period only saw 2,171,987 immigrants come to Canada (House of Commons Debates 2018, 19760).

The Conservative Party also expressed pessimism about the fairness of technology, stressing possible algorithmic bias in immigration systems. Brad Redekopp, the Conservative MP from Saskatoon West, criticized Chinook, arguing that it was introduced in-house by “bureaucrats” and stating:

I know first-hand the dangers of unregulated AI systems interfering in our day-to-day lives. On the immigration committee, we have studied this issue and looked at how Canada’s immigration department is using Chinook, a so-called e-tool to help IRCC bureaucrats assess applications in bulk form. This AI program was introduced in-house by these bureaucrats, which means the software’s algorithms are beholden to the beliefs of its creators (House of Commons Debates 2023d, 12022).

Redekopp also mentions (a) a “culture of racism within the department,” referring to IRCC, and (b) the absence of “outside consultation” in developing Chinook

(House of Commons Debates 2023d, 12022). This critique somewhat aligns with Amnesty International Canada’s (2024a) findings on bias in Canadian immigration AI tools, particularly in the rejection of visa applications from racialized applicants.

The party’s pessimist stance raises questions about whether their critique was driven by genuine policy concerns or simply political opposition to the governing party, which included Liberal-led AI initiatives. Proksch and Slapin (2012) argue that opposition parties engage more actively in specific policy areas to hold the government accountable. This arguably underscores why, in discussions on ethics and AI, the Conservative corpus is the most extensive, comprising 25,669 words.

Conservative MPs have highlighted racial and gender biases embedded in AI systems and have been particularly vocal in their critiques of AI’s role in undermining civil liberties and privacy protections. Their concerns frequently reference the unauthorized use of Clearview AI—an American facial recognition company that provides software primarily to law enforcement and other government agencies—by the Royal Canadian Mounted Police (Tunney 2021).

Conservative MP James Bezan, the shadow Minister of National Defence of Canada representing Selkirk—Interlake—Eastman, Manitoba, mentioned Bill C-27, also known as the Digital Charter Implementation Act 2022, “falls short on what needs to happen to protect privacy” (House of Commons Debates 2022a, 10097). Notably, Bill C-27 is one of the foundational frameworks for AI regulation in Canada, particularly through the AIDA. Additionally, Ryan Williams, the then Conservative MP from Bay of Quinte, Ontario, emphasized that “transparency and accountability should be at the forefront of AI development, ensuring that individuals have control over their own information” (House of Commons Debates 2023e, 16093).

The Conservative Party balances some aspects of human rights considerations with national security concerns, particularly regarding foreign interference and privacy. Bezan warned against “using artificial intelligence to profile and identify people using mass surveillance techniques,” referring to Clearview AI (House of Commons Debates 2022a, 10097). This position aligns with broader Conservative concerns over digital privacy, emphasizing that Bill C-27 “falls way short” in addressing these risks (House of Commons Debates 2022a, 10098).

Similarly, Williams highlighted concerns about algorithmic bias in facial recognition systems such as Clearview AI (House of Commons Debates 2023e, 16093). Williams acknowledged that “AI systems, while designed to learn and improve, can also develop biases,” emphasizing the need for stricter oversight (House of Commons Debates 2023e, 16093). However, there has been no discussion of specific oversight mechanisms. For example, the Conservative Party has not debated the incorporation of concepts such as HITL or EbD per se.

THE NEW DEMOCRATIC PARTY (NDP) AND CAUTIOUS ADVOCACY FOR HUMAN RIGHTS

In the context of the immigration and AI discourse, the New Democratic Party's (NDP) contribution comprises 5,086 words, exceeding that of the Bloc Québécois (2,225 words), and the Green Party (217 words). While the NDP's engagement remains limited compared to the Liberal and Conservative parties, the NDP's discourse emphasizes regulations. This focus is reflected in their distinctive keywords (TF-IDF), which include words like "amendments" and "regulations."

Jenny Kwan, the NDP MP for Vancouver East, cited the Auditor General's findings that AI exacerbates racial disparities, particularly for visa applicants from sub-Saharan Africa and Haiti (House of Commons Debates 2023f, 17779). Kwan further warned that "new AI tools discriminately double wait times for Haitian citizens."

NDP MPs have also raised concerns about racial and gender biases embedded in AI systems. While the NDP's contributions on AI and ethics are relatively limited compared to other parties (4,563 words), their interventions emphasize the social risks posed by emerging technologies. Matthew Green, the then NDP MP from Hamilton Centre, cited testimony indicating:

Witnesses like Cynthia Khoo from the Center on Privacy and Technology at Georgetown Law School, Angelina Wang and Christelle Tessono from Princeton University made it clear that facial recognition technology is 100 times more likely to misidentify Black and Asian individuals. For darker-skinned women, the misidentification rate can exceed one in three (House of Commons Debates 2024a, 26468).

Such testimonies warn that these inaccuracies risk entrenching systemic discrimination. NDP MPs have additionally expressed skepticism regarding Canada's regulatory capacity to manage the ethical risks associated with AI. Matthew Green emphasized the need for a regulatory framework grounded in "equity, accountability and human rights" (House of Commons Debates 2024a, 26468). Similarly, Charlie Angus, the then NDP MP for Timmins—James Bay, characterized AI surveillance as a direct threat to civil liberties, underscoring the "right not to be tracked" (House of Commons Debates 2024b, 23445). Angus further emphasized the need to protect privacy in light of "the failure of the government to address the privacy rights of citizens and the right to privacy as a fundamental right" (House of Commons Debates 2024b, 23445). This discussion is closely related to questions concerning the regulation of AI and the interpretation of human rights in light of the Universal Declaration of Human Rights (UDHR) in the age of artificial intelligence.

On the topic of AI and human rights, the NDP links AI governance to broader social justice concerns, including labour rights, economic inequality, and racial dis-

crimination. Brian Masse, the then NDP MP for Windsor West, called for a “Digital Bill of Rights” and raised concerns about Canada’s inadequate privacy protections, emphasizing that digital rights must be treated as fundamental human rights (House of Commons Debates 2020a, 2297). Masse asserted that “people’s online presence and the digital footprint they leave [...] is just as important as their physically enshrined rights” (House of Commons Debates 2020a, 2297).

Similarly, Peter Julian, the then NDP MP for New Westminster—Burnaby in British Columbia, addressed concerns about facial recognition technology. Julian underscored a recommendation that “[t]he Government of Canada update the Canadian Human Rights Act to ensure that it applies to discrimination caused by the use of facial recognition technology and other artificial intelligence technologies” (House of Commons Debates 2024c, 27175). Green warned that “facial recognition [...] misidentify Black and Asian individuals,” highlighting how AI bias could disproportionately harm racialized immigrants, potentially resulting in wrongful detentions or deportations (House of Commons Debates 2024a, 26468).

THE BLOC QUÉBÉCOIS AND CRITICAL NEUTRALITY ON AI

The Bloc Québécois’ distinctive keywords (TF-IDF) include “québécois,” “bloc,” “uighurs,” and “uighur.” These keywords highlight that the Bloc has framed AI and immigration within the context of Quebec’s distinctiveness and skepticism toward federal control.

While the Bloc supports AI regulation to ensure ethical use, the party criticized Bill C-27, officially known as the Digital Charter Implementation Act 2022, for prioritizing industry growth over citizen protections. René Villemure, the then Bloc MP representing Trois-Rivières, expressed concerns about AI’s role in policing and surveillance, warning against the unchecked deployment of such technology because “it does not always work perfectly” (House of Commons Debates 2024a, 26457).

The Bloc Québécois has also advocated for stronger public-sector data protections. Sébastien Lemire, the Bloc MP for Abitibi—Témiscamingue, Quebec, criticized Bill C-27 for focusing exclusively on private-sector data governance, stating that “[p]ublic services, however, are not covered by this bill” (House of Commons Debates 2022a, 10108). In this context, Lemire refers specifically to federal public services, such as the Canada Revenue Agency and The Canada Emergency Response Benefit, highlighting skepticism about federal data governance and arguing that Bill C-27 fails to address privacy protections in federally administered public programs. This critique also reflects broader Bloc Québécois concerns about federal oversight and Quebec’s jurisdiction over privacy.

Regarding AI and human rights, Alexis Brunelle-Duceppe, the Bloc MP repre-

senting Lac-Saint-Jean, Quebec, strongly supported Motion No. 62, which called for the resettlement of Uighur and Turkic Muslim refugees from China (House of Commons Debates 2022b). Brunelle-Duceppe argued that “nobody can plead ignorance” regarding the persecution of Uighurs, framing Canada’s immigration practices as a moral obligation to protect those fleeing AI-driven surveillance and repression (House of Commons Debates 2022b, 8920). Similarly, Kristina Michaud, the then Bloc MP for Avignon–La Mitis–Matane–Matapédia, warned that “the Chinese Communist Party will continue to assert itself more aggressively” (House of Commons Debates 2020a, 2020b). The Bloc’s engagement has framed immigration as a response to international human rights abuses, particularly in authoritarian states.

GREEN PARTY: QUIET ON ETHICS AND HUMAN RIGHTS

The Green Party has contributed minimally to debates on AI and immigration in the House of Commons, reflecting the fact that they did not have many elected officials. However, Elizabeth May, the leader and MP for Saanich—Gulf Islands, emphasized the need for increased immigration levels to address labour shortages (House of Commons Debates 2022c). May stated, “We could do far more to prepare for artificial intelligence by moving to a guaranteed livable income as quickly as possible to protect our economy from the coming shocks” (House of Commons Debates 2022c, 9324). May framed AI primarily as an economic challenge rather than a policy tool with exclusionary implications, further contributing to how the Green Party remained largely absent from discussion on AI ethics and human rights.

DISCUSSION

This foregoing discussion reveals a critical tension in Canadian parliamentary debates, namely there is a sharp divide between techno-optimist and techno-pessimist framings of AI and immigration management. The Liberal Party embodied a techno-optimist stance, positioning AI as a tool for economic growth, innovation, and administrative modernization. This reflects Danaher’s (2022, 8) definition of techno-optimism, which argues that technology is key to ensuring “the good prevails over the bad,” and aligns with the party’s broader digital transformation agenda and Canada’s Digital Ambition plan (Treasury Board of Canada 2025). However, as Avle et al. (2020) caution, such techno-optimistic visions risk masking underlying socio-political structures of inequality, thereby reinforcing settler-colonial logics rather than disrupting them.

In contrast, the Conservative Party has adopted a techno-pessimist framing, emphasizing risks such as surveillance, privacy erosion, and algorithmic bias. While

this stance resonates with Prescott's critique of techno-pessimism as a belief that "the bad prevails over the good" (as cited in Danaher 2022, 3), it often fails to articulate a transformative vision grounded in human rights or social justice. The Conservative Party did not propose concrete alternatives for the practical governance of the technology and mitigate its risks. Although they engaged in criticism, this alone does not constitute an adequate policy response. This finding aligns with Findlay's (2014) review of *Across the Aisle: Opposition in Canadian Politics* that opposition parties frequently focus on critique or "protest" rather than strictly adhering to a role of offering constructive alternatives or being a "government-in-waiting." However, the traditional Westminster model expects the opposition to be a "government-in-waiting," implying a focus on developing and presenting alternative policies and demonstrating readiness to govern.

The New Democratic Party advanced a more rights-based and cautious approach, calling for regulatory frameworks that prioritize human rights and equity. This position echoes calls by scholars such as Molnar and Gill (2018), who argue that efficiency-driven technological interventions in migration governance often automate and legitimize discrimination. The NDP's advocacy for a "Digital Bill of Rights" aligns with broader international human rights frameworks, including the UDHR and calls for "digital human rights in the age of AI" (Otieno 2007; Khazanchi and Saxena 2025).

Reading the Bloc Québécois, we observe that it emphasizes privacy and provincial autonomy, framing AI within debates about national sovereignty and human rights abuses abroad (e.g., Uighur surveillance in China). This approach underscores the multidimensionality of AI governance, where privacy concerns intersect with geopolitical and cultural narratives (as presented in the speech of Brunelle-Duceppe 2022).

Despite these differences, all parties share a notable absence: the lack of substantive discussion on comprehensive governance frameworks such as human-in-the-loop (HITL) and ethics-by-design (EbD). As Agudo et al. (2024) and Brey and Dainow (2023) demonstrate, such models are central to mitigating systemic harms and embedding accountability into AI systems. The neglect of these approaches in Canadian parliamentary debates underscores another significant gap in technological literacy and ethical commitment. This effectively leaves it to other civil society forces to engage what Attard-Frost (2023) terms "AI counter-governance" and push back on top-down regulatory models.

Furthermore, the Liberal Party's preference for "light, tight, right" regulatory frameworks (Scott 2025, para. 8) exemplifies a technocratic mindset that prioritizes global competitiveness over robust rights protections. This resonates with Winner's (2009) argument that technologies often embody and reinforce specific power structures, including what Muldoon and Wu (2023) call the "colonial matrix of power." In this sense, parliamentary discourse does not merely mirror divergent partisan

positions but actively constructs a socio-political reality where technological efficiency and economic competitiveness are prioritized over social justice and the dismantling of colonial structures that reinforce racialized exclusion.

Policy implications from these findings are urgent and multifaceted. Now is the time to move beyond political debates and to design an AI regulatory framework that combats potential harms. Canada must, at a practical level, address concerns raised by Amnesty International Canada (2024a) and by immigration lawyers among others. This means moving beyond superficial regulatory measures toward governance frameworks that embed EbD, mandate independent audits, and centre marginalized voices in technological decision-making. The establishment of a dedicated parliamentary subcommittee on AI and human rights could ensure continuous ethical oversight and democratic accountability. In sharp contrast to Evan Solomon, the Minister of Artificial Intelligence and Digital Innovation, proposed legislation like the AIDA should be seriously considered as a means to protect Canadians, newcomers, and asylum seekers from technological harm.

Future research should extend this analysis by comparing such studies with other settler-colonial contexts, such as Australia and the U.S. This orientation could elucidate transnational patterns of techno-governance and racialized exclusion. Additionally, qualitative interviews with policymakers could provide deeper insights into their conceptualizations of technological ethics, accountability, and human rights.

Ultimately, this study underscores the need for a transformative approach to AI governance in Canada—one that foregrounds human rights, actively challenges colonial legacies, and prioritizes social justice over administrative expediency.

CONCLUSION

Returning to the central question of this paper—how Canadian political parties represented in Parliament have debated the role of AI and immigration management from 2014 to 2024—this study fills a critical gap by bridging empirical analysis of Canadian parliamentary discourse with theoretical critiques of techno-governance and settler-colonial structures. It also concludes that discourse on AI and immigration has been primarily shaped by the Liberal and Conservative parties, given their dominant roles in Canadian politics. Our analysis reveals partisan differences: the governing Liberal Party tends to adopt a techno-optimist stance that emphasizes modernization and efficiency, while the Conservative opposition often articulates a techno-pessimist critique, focused on risks of automation and bureaucratic overreach.

At the same time, we find that the nature of partisan debate in the House of Commons fails to engage the wide-ranging and systemic concerns identified by scholars and human rights stakeholders, especially those addressing the reproduc-

tion of colonial logics in AI-driven immigration management. Moreover, in certain respects, it may even be characterized by a degree of technological illiteracy. This is concerning given the critical role political parties play in mediating between the state and civil society; parties are therefore not well positioned to advance effective and ethical governance frameworks, nor to foster robust public debate and understanding, given the tenor of discussions.

Importantly, as Morozov (2013, 207) argues, it is essential to “avoid the totalizing anti-technology discourse that seeks to reject all technological interventions as illegitimate and inherently morally corrosive.” Our analysis does not advocate such a wholesale rejection; rather, it calls for a more critical and nuanced engagement with technology that recognizes its social and political implications, especially in the context of migration management.

Given that technological advances are both ongoing and rapid—particularly in the field of immigration—we hope that this assessment can serve to encourage greater awareness of these shortfalls as well as stimulate efforts to collectively address them within Canada.

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NOTES

1. This term refers to the way of observing, categorizing, and controlling human mobility on a global scale, with profound consequences for individuals and the nature of state power, see Broeders and Dijstelbloem (2016).

2. For further information on ourcommons.ca, see: <https://www.ourcommons.ca/documentviewer/en/44-1/house/hansard-index>

3. For further information on openparliament.ca, see: <https://openparliament.ca/debates/>

4. For further information on Michael Elmulley’s work, see: <https://michaelmulley.com/#2>

5. To access these concepts please see: <https://docs.google.com/document/d/1xaG33EjFzjYIgnPrhj8ozW15w1eGUZ8Mp8c-GdJ2hnE/edit?tab=t.0>

6. For transparency, we made the notebooks public so that anyone can access and experiment with it: <https://voyant-tools.org/spyral/EleyanSawafta-create@gh/4XFqLU/>, <https://voyant-tools.org/spyral/EleyanSawafta-create@gh/A3rlHj/>, and <https://voyant-tools.org/spyral/EleyanSawafta-create@gh/vnSUBZ/>

7. For more information, visit: <https://voyant-tools.org/docs/tutorial-about.html>

REFERENCES

- Abu-Laban, Yasmeen, Ethel Tungohan and Christina Gabriel. 2023. *Containing Diversity: Canada and the Politics of Immigration in the 21st Century*. Toronto: University of Toronto Press.
- Abu-Laban, Yasmeen. 2021. “Multiculturalism: Past, Present and Future.” *Canadian Diversity* (Special Issue on Multiculturalism at 50: Promoting Inclusion and Eliminating Racism, Guest Edited by Will Kymlicka). 18, 1. 9-12.

- Abu-Laban, Yasmeen. 2024. "Race, Ethnicity, Cultural Diversity and Party Politics in Canada: Representation and Discourse." In Alain-G. Gagnon and Brian Tanguay (eds.). *Canadian Parties in Transition* (5th Edition). Toronto: University of Toronto Press: 406-423.
- Agudo, Ujué, Karlos G. Liberal, Miren Arrese, and Helena Matute. 2024. "The Impact of AI Errors in a Human-in-the-loop Process." *Cognitive Research Principles and Implications* 9 (1): 1-16. <https://doi.org/10.1186/s41235-023-00529-3>.
- Amnesty International. 2018. "The Toronto Declaration: Protecting the Rights to Equality and Non-discrimination in Machine Learning Systems - Amnesty International." © Amnesty International. Index: POL 30/8447/2018. Accessed January 11, 2025. <https://www.amnesty.org/en/documents/pol30/8447/2018/en/>
- Amnesty International Canada. 2024a. "Study of Bill C-27." © Amnesty International. Accessed April 23, 2025. <https://www.ourcommons.ca/Content/Committee/441/INDU/Brief/BR12951650/br-external/Jointly12-067-240301-015-e.pdf>.
- Amnesty International. 2024b. "The Digital Border: Migration, Technology, and Inequality." © Amnesty International. Index: POL 40/7772/2024. Accessed January 16, 2025. <https://www.amnesty.org/en/documents/pol40/7772/2024/en/>
- Arai, Maggie. 2025. "What's Next After AIDA?" *Schwartz Reisman Institute*. February 15, 2025. Accessed March 2nd, 2025. <https://srinstitute.utoronto.ca/news/whats-next-for-aida>.
- Attard-Frost, Blair, Ana Brandusescu, and Kelly Lyons. 2024. "The Governance of Artificial Intelligence in Canada: Findings and Opportunities From a Review of 84 AI Governance Initiatives." *Government Information Quarterly* 41 (2): 101929. <https://doi.org/10.1016/j.giq.2024.101929>.
- Attard-Frost, Blair. 2023. "AI Countergovernance." *Midnight Sun*. December 16, 2023. Accessed June 15, 2025. <https://www.midnightsunmag.ca/ai-countergovernance/>.
- Attard-Frost, Blair. 2025. "The Death of Canada's Artificial Intelligence and Data Act: What Happened, and What's Next for AI Regulation in Canada? | Montreal AI Ethics Institute." *Montreal AI Ethics Institute*. January 17, 2025. Accessed June 5, 2025. <https://montrealaiethics.ai/the-death-of-canadas-artificial-intelligence-and-data-act-what-happened-and-whats-next-for-ai-regulation-in-canada/>.
- Avle, Seyram, Cindy Lin, Jean Hardy, and Silvia Lindtner. 2020. "Scaling Techno-Optimistic Visions." *Engaging Science, Technology, and Society (ESTS)*. Vol. 6 (2020). 237-54. <https://doi.org/10.17351/ests2020.283>.
- Bäck, Hanna, Markus Baumann, Marc Debus, and Jochen Müller. 2019. "The Unequal Distribution of Speaking Time in Parliamentary-Party Groups." *Legislative Studies Quarterly* 44 (1): 163-93. <https://doi.org/10.1111/lsq.12222>
- Beelen, Kaspar, Timothy Alberdingk Thijm, Christopher Cochrane, Kees Halvemaan, Graeme Hirst, Michael Kimmins, Sander Lijbrink, et al. 2017. "Digitization of the Canadian Parliamentary Debates." *Canadian Journal of Political Science* 50 (3): 849-64. <https://doi.org/10.1017/s0008423916001165>.
- Birkstedt, Teemu, Matti Minkkinen, Anushree Tandon, and Matti Mäntymäki. 2023. "AI Governance: Themes, Knowledge Gaps and Future Agendas." *Internet Research* 33 (7): 133-67. <https://doi.org/10.1108/intr-01-2022-0042>.
- Blommaert, Jan, and Chris Bulcaen. 2000. "Critical Discourse Analysis." *Annual Review of Anthropology* 29 (1): 447-66. <https://doi.org/10.1146/annurev.anthro.29.1.447>.
- Brey, Philip, and Brandt Dainow. 2023. "Ethics by Design for Artificial Intelligence." *AI And Ethics* 4 (4): 1265-77. <https://doi.org/10.1007/s43681-023-00330-4>.
- Broeders, Dennis and Huub Dijkstra. 2016. "The Datafication of Mobility and Migration Management: The Mediating State and its Consequences." In I. Van der Ploeg and J. Pridmore (eds.). *Digitizing Identities: Doing Identity in a Networked World*. London: Routledge: 242-260.
- House of Commons Debates. 2017a. *Official Report (Hansard)*, 42nd Parliament, 1st Session, vol. 148, no. 169 (3 May). Ottawa: Canadian Government Publishing. <https://www.ourcommons.ca/documentviewer/en/42-1/house/sitting-169/hansard>
- House of Commons Debates. 2017b. *Official Report (Hansard)*, 42nd Parliament, 1st Session, vol. 148, no. 159 (4 April). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/42-1/house/sitting-159/hansard>

- House of Commons Debates. 2018. *Official Report (Hansard)*, 42nd Parliament, 1st Session, vol. 148, no. 302 (28 May). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/42-1/house/sitting-302/hansard>
- House of Commons Debates. 2020a. *Official Report (Hansard)*, 43rd Parliament, 2nd Session, vol. 150, no. 035 (24 November). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/43-2/house/sitting-35/hansard>
- House of Commons Debates. 2020b. *Official Report (Hansard)*, 43rd Parliament, 2nd Session, vol. 150, no. 030 (17 November). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/43-2/house/sitting-30/hansard>
- House of Commons Debates. 2022a. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 136 (28 November). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-136/hansard>
- House of Commons Debates. 2022b. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 118 (26 October). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-118/hansard>
- House of Commons Debates. 2022c. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 124 (3 November). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-124/hansard>
- House of Commons Debates. 2023a. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 213 (14 June). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-213/hansard>
- House of Commons Debates. 2023b. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 181 (20 April). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-181/hansard>
- House of Commons Debates. 2023c. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 190 (3 May). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-190/hansard>
- House of Commons Debates. 2023d. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 165 (7 March). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-165/hansard>
- House of Commons Debates. 2023e. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 214 (15 June). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-214/hansard>
- House of Commons Debates. 2023f. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 237 (23 October). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-237/hansard>
- House of Commons Debates. 2024a. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 352 (9 October). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-352/hansard>
- House of Commons Debates. 2024b. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 314 (21 May). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-314/hansard>
- House of Commons Debates. 2024c. *Official Report (Hansard)*, 44th Parliament, 1st Session, vol. 151, no. 362 (30 October). Ottawa: Canadian Government Publishing. <https://www.noscommunes.ca/documentviewer/en/44-1/house/sitting-362/hansard>
- IRCC. 2022a. “CIMM – Chinook Development and Implementation in Decision-Making – February 15 & 17, 2022.” *Canada.Ca*. Accessed January 15, 2025 <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/transparency/committees/cimm-feb-15-17-2022/chinook-development-implementation-decision-making.html>.
- IRCC. 2022b. “CIMM – Student Approval Rates by Country of Residence – February 15 and 17, 2022.” *Canada.Ca*. Accessed March 21, 2025 <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/transparency/committees/cimm-feb-15-17-2022/student-approval-rates.html>.

- IRCC. 2022c. "CIMM – Advanced Data Analytics to Sort and Help Process Temporary Resident Visa Applications – March 24, 2022." *Canada.Ca*. Accessed July 16, 2024. <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/transparency/committees/cimm-mar-24-2022/advanced-data-analytics-sort-help-process-temporary-resident-visa-applications.html>.
- IRCC. 2024. "CIMM – Chinook Development and Implementation in Decision-Making – February 28, 2024." *Canada.Ca*. June 27, 2024. Accessed July 17, 2025. <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/transparency/committees/cimm-feb-28-2024/chinook-development-decision-making.html>.
- Innovation, Science and Economic Development Canada. 2023. "Artificial Intelligence and Data Act." September 27, 2023. *Canada.Ca*. Accessed February 2, 2025. <https://ised-isde.canada.ca/site/innovation-better-canada/en/artificial-intelligence-and-data-act-aida-companion-document>.
- Innovation, Science and Economic Development Canada. 2024. "Canada Launches Canadian Artificial Intelligence Safety Institute." *Canada.Ca*. Accessed April 17, 2025. <https://www.canada.ca/en/innovation-science-economic-development/news/2024/11/canada-launches-canadian-artificial-intelligence-safety-institute.html>.
- Parliament. House of Commons. The Standing Committee on Citizenship and Immigration. 2022a. *Promoting Fairness in Canadian Immigration Decisions*. 1st session. 44th Parliament. Committee Report No. 12. House of Commons of Canada. Accessed June 5, 2025. <https://www.ourcommons.ca/Content/Committee/441/CIMM/Reports/RP12060621/cimmp12/cimmp12-e.pdf>
- Parliament. House of Commons. The Standing Committee on Citizenship and Immigration. 2022b. *Evidence*. 1st session. 44th Parliament. Committee Report No. 11. House of Commons of Canada. Accessed August 3, 2024. <https://www.ourcommons.ca/DocumentViewer/en/44-1/CIMM/meeting-11/evidence>.
- Treasury Board of Canada. 2025. "Canada's Digital Ambition 2023-24." *Canada.Ca*. February 26, 2025. Accessed May 19, 2025. <https://www.canada.ca/en/government/system/digital-government/canada-digital-ambition/canada-digital-ambition-2023-24.html>.
- Castaldo, Joe. 2025. "Momentum to Pass Regulatory Legislation for AI Has Slowed Considerably in Canada and the U.S." *The Globe and Mail*, January 20, 2025. Accessed January 21, 2025. <https://www.theglobeandmail.com/business/article-momentum-to-pass-regulatory-legislation-for-ai-has-slowed-considerably/>.
- Chartier-Edwards, Nicolas, Marek Blottiere, and Jonathan Roberge. 2024. "AI Statecraft Heating-up: The Automation of Governance through Canada's Chinook Case Study." *AI & SOCIETY*. 1-10. <https://doi.org/10.1007/s00146-024-01903-5>.
- Cornelissen, N. A. J., R. J. M. Van Eerd, H. K. Schraffenberger, and W. F. G. Haselager. 2022. "Reflection Machines: Increasing Meaningful Human Control Over Decision Support Systems." *Ethics and Information Technology*. 24 (2): 1-15. <https://doi.org/10.1007/s10676-022-09645-y>.
- Danaher, John. 2022. "Techno-optimism: An Analysis, an Evaluation and a Modest Defence." *Philosophy & Technology* 35 (2): 1-29. <https://doi.org/10.1007/s13347-022-00550-2>.
- Elish, Madeleine Clare. 2019. "Moral Crumple Zones: Cautionary Tales in Human-Robot Interaction." *Engaging Science Technology and Society*. 23 Mar 2019: 40–60. <https://doi.org/10.17351/ests2019.260>.
- Ellermann, Antje. 2019. "Discrimination in Migration and Citizenship." *Journal of Ethnic and Migration Studies* 46 (12): 2463–79. <https://doi.org/10.1080/1369183x.2018.1561053>.
- European Commission. 2021. *Ethics by Design and Ethics of Use Approaches for Artificial Intelligence*. Coordinated by Alben Kuyumdzhiyeva; authored by Brandt Dainow and Philip Brey. Brussels: European Commission, Directorate-General for Research & Innovation (DG R&I). Accessed August 14, 2024. https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ethics-by-design-and-ethics-of-use-approaches-for-artificial-intelligence_he_en.pdf.
- Fairclough, Norman. 1992. "Discourse and Text: Linguistic and Intertextual Analysis Within Discourse Analysis." *Discourse & Society* 3 (2): 193–217. <https://doi.org/10.1177/0957926592003002004>.
- Findlay, Martha Hall. 2014. "Parliamentary Opposition, in Theory." Review of Across the Aisle: Opposition in Canadian Politics, by David E. Smith, *Literary Review of Canada*. Accessed May 20, 2025. <https://reviewcanada.ca/magazine/2014/04/parliamentary-opposition-in-theory/>.
- Foucault, Michel. 1972. *The Archaeology of Knowledge and the Discourse on Language*. Translated from French by A. M. Sheridan Smith. Pantheon Books, New York.

- G7. 2025. *G7 Leaders' Statement on AI for Prosperity*. G7 Canada (June 16, 2025). Accessed June 19, 2025. <https://g7.canada.ca/en/news-and-media/news/g7-leaders-statement-on-ai-for-prosperity/>
- Green, Ben. 2022. "The Flaws of Policies Requiring Human Oversight of Government Algorithms." *Computer Law & Security Review* 45 (April): 105681: 1-22. <https://doi.org/10.1016/j.clsr.2022.105681>.
- Jain, Abhishek. 2024. "TF-IDF in NLP (Term Frequency Inverse Document Frequency)." *Medium*, February 4, 2024. Accessed July 26, 2025. <https://medium.com/@abhishekjainindore24/tf-idf-in-nlp-term-frequency-inverse-document-frequency-e05b65932f1d>.
- Karas, Sergio R and Reeva Goel. 2023. "Artificial intelligence and Canada's immigration system." *International Bar Association*. April 20, 2023. Accessed April 25, 2025. <https://www.ibanet.org/artificial-intelligence-in-immigration>
- Khazanchi, Deepak, and Mahima Saxena. 2025. "Navigating Digital Human Rights in the Age of AI: Challenges, Theoretical Perspectives, and Research Implications." *Journal of Information Technology Case and Application Research*. 1–14. <https://doi.org/10.1080/15228053.2025.2452028>.
- Kronick, Rachel, and Cécile Rousseau. 2015. "Rights, Compassion and Invisible Children: A Critical Discourse Analysis of the Parliamentary Debates on the Mandatory Detention of Migrant Children in Canada." *Journal of Refugee Studies* 28 (4): 544–69. <https://doi.org/10.1093/jrs/fev005>.
- Lehal, Kamaljit Kaur. 2025. "Artificial Intelligence and automated decision-making in Immigration Law." *The Canadian Bar Association*. January 25, 2025. August 26, 2025. https://cba.org/getmedia/431e5ccadde5-4bfa-80f2-b406fedbdd46/25-05-eng_1.pdf
- McLaurichlan, Madison. 2025. "AI Minister Evan Solomon Wary of Overdoing Regulation, but Says Bill C-27 'Not Gone'" *BetaKit*. June 12, 2025. Accessed July 2, 2025. <https://betakit.com/ai-minister-evan-solomon-wary-of-overdoing-regulation-but-says-bill-c-27-not-gone/>.
- Molnar, Petra and Lex Gill. 2018. *Bots at the Gate: A Human Rights Analysis of Automated Decision-Making in Canada's Immigration and Refugee System*. Edited by Ronald J. Deibert, Samer Muscati, Lisa Austin, Audrey Macklin, David Lie, Cynthia Khoo, Tamir Israel, et al. Citizen Lab. <https://tspace.library.utoronto.ca/bitstream/1807/94802/1/IHRP-Automated-Systems-Report-Web-V2.pdf>.
- Molnar, Petra. 2020. *Technological testing grounds: Migration management experiments from the ground Up*. EDRI and Refugee Law Lab, <https://edri.org/wp-content/uploads/2020/11/Technological-Testing-Grounds.pdf>
- Morozov, Evgeny. 2013. *To Save Everything, Click Here: The Folly of Technological Solutionism*. PublicAffairs. EBSCO.
- Muldoon, James, and Boxi, A Wu. 2023. "Artificial Intelligence in the Colonial Matrix of Power." *Philosophy & Technology* 36 (80): 1-24. <https://doi.org/10.1007/s13347-023-00687-8>.
- Nalbandian, Lucia. 2022. "An Eye for an 'I': a Critical Assessment of Artificial Intelligence Tools in Migration and Asylum Management." *Comparative Migration Studies* 10 (1): 1-23. <https://doi.org/10.1186/s40878-022-00305-0>.
- Nussbaumer, Alexander, Andrew Pope, and Karen Neville. 2021. "A Framework for Applying Ethics-by-design to Decision Support Systems for Emergency Management." *Information Systems Journal* 33 (1): 34–55. <https://doi.org/10.1111/isj.12350>.
- Otieno, Alex. 2007. "Eliminating Racial Discrimination: The Challenges of Prevention and Enforcement of Prohibition." United Nations. Accessed July 31, 2023. <https://www.un.org/en/chronicle/article/eliminating-racial-discrimination-challenges-prevention-and-enforcement-prohibition>.
- Pickup, Mark, Steven Nuss, Erik O. Kimbrough, and Clifton Van Der Linden. 2023. "Countering the Trump Effect in Canada: Strengthening Support for Immigrants Using National Identity." *Politics Groups and Identities* 12 (4): 761–81. <https://doi.org/10.1080/21565503.2023.2227439>.
- Proksch, Sven-Oliver, and Jonathan B. Slapin. 2012. "Institutional Foundations of Legislative Speech." *American Journal of Political Science* 56 (3): 520–37. <http://www.jstor.org/stable/23316004>.
- Reuters. 2024. "Pope Francis Tells G7 That Humans Must Not Lose Control of AI." Updated: June 14, 2024. Accessed January 9, 2025. <https://www.reuters.com/world/pope-francis-tells-g7-that-humans-must-not-lose-control-ai-2024-06-14/>.
- Scott, Josh. 2025. "'Light, Tight, Right' Regulation: Minister Evan Solomon Unpacks How Canada Plans to Support Domestic AI and Quantum Computing." *Betakit*, June 27, 2025. Accessed July 2, 2025. <https://betakit.com/light-tight-and-right-regulation-minister-evan-solomon-unpacks-how-canada-plans-to-support-domestic-ai-and-quantum-computing/>.

- Sinclair, Stéfán and Geoffrey Rockwell (2025). "Corpus Collocates - Voyant Tools Help." Voyant Tools. February 14, 2024. <https://libvoyant.unm.edu/docs/#!/guide/corpuscollocates>.
- Steinman, M Robert and Naomi-Edith Barandereka. 2023. "Chinook: Immigration Canada's New Tool for Immigration Applications." *McCarthy Tétrault*. March 7, 2023. Accessed November 13, 2024 <https://www.mccarthy.ca/en/insights/blogs/spotlight-can-asia/chinook-immigration-canadas-new-tool-immigration-applications>.
- Tao, Will. 2022a. "Chinook Is AI – IRCC'S Own Policy Playbook Tells Us Why." *Vancouver Immigration Blog*. February 9, 2022. Accessed February 18, 2025. <https://vancouverimmigrationblog.com/chinook-is-ai-irccs-own-policy-playbook-tells-us-why/>.
- Tao, Will. 2022b. "Why If There's No "N/A" Risk Flag on Your GCMS Notes, You May Have Been Risk Flagged." *Vancouver Immigration Blog*. Accessed January 15, 2025. <https://vancouverimmigrationblog.com/riskflag-chinook/>.
- Triandafyllidou, Anna, and Brenda S. A. Yeoh. 2023. "Sustainability and Resilience in Migration Governance for a Post-pandemic World." *Journal of Immigrant & Refugee Studies* 21 (1): 1–14. <https://doi.org/10.1080/15562948.2022.2122649>.
- Triandafyllidou, Anna, Marta Bivand Erdal, Sabrina Marchetti, Parvati Raghuram, Zeynep Sahin Mencutek, Justyna Salamo ska, Peter Scholten, and Daniela Vintila. 2024. "Rethinking Migration Studies for 2050," *Journal of Immigrant & Refugee Studies*, 22:1, 1-21, DOI: 10.1080/15562948.2023.2289116
- Tunney, Catharine. 2021. "RCMP's use of facial recognition tech violated privacy laws, investigation finds." *CBC*. June 10, 2021. Accessed March 7, 2024. <https://www.cbc.ca/news/politics/rcmp-clearview-ai-1.6060228>
- United Nations. Office of the United Nations High Commissioner for Human Rights. 2023. "Artificial Intelligence Must Be Grounded in Human Rights, Says High Commissioner." Accessed January 26, 2025. <https://www.ohchr.org/en/statements/2023/07/artificial-intelligence-must-be-grounded-human-rights-says-high-commissioner>.
- Winner, Langdon. 2009. "Do Artifacts Have Politics?" *Daedalus*. Accessed December 9, 2024. <https://faculty.cc.gatech.edu/~beki/cs4001/Winner.pdf>.
- Ziaie, Zeynab. 2021. "Chinook and Canadian Immigration: An Efficiency-enhancing Tool or Cause for Concern?" *Canadian Immigration Lawyers Association (CILA)*. December 6, 2021. Accessed September 15, 2024 <https://cila.co/chinook-and-canadian-immigration-an-efficiency-enhancing-tool-or-cause-for-concern/>

ELEYAN SAWAFTA is Canada's Highly Qualified Personnel, a PhD student, and Graduate Research Assistant at the University of Alberta, supervised by Dr. Yasmeeen Abu-Laban.

ZARIF MASUD is a PhD student in Computer Engineering at Toronto Metropolitan University, co-supervised by Dr. Ebrahim Bagheri and Dr. Ishtiaque Ahmed. His research interests sit at the intersection of responsible AI, social computing, and migration studies. Using techniques from natural language processing and information retrieval, Zarif takes a critical lens to observe how immigration is framed across various media and popular culture, and how data-driven systems are embedded within them biased frames that end up marginalizing migrants.

YASMEEN ABU-LABAN is Professor and Canada Research Chair in the Politics of Citizenship and Human Rights in the Department of Political Science at the University of Alberta. Her recent books include (with Ethel Tungohan and Christina Gabriel) *Containing Diversity: Canada and the Politics of Immigration in the 21st Century* (University of Toronto Press, 2023), She is also co-editor (with Alain-G. Gagnon and Arjun Tremblay) of *Assessing Multiculturalism in Global Comparative Perspective: A New Politics of Diversity for the Twenty-First Century?* (Routledge, 2023) and co-editor (with Michael Frishkopf, Reza Hasmath and Anna Kirova) of *Resisting the Dehumanization of Refugees* (Athabasca University Press, 2024). She served as President of the Canadian Ethnic Studies Association from 2022 to 2024.

SYED ISHTIAQUE AHMED is an Associate Professor of Computer Science at the University of Toronto and founding director of the Third Space research group. His work sits at the intersection of Human-Computer Interaction and Artificial Intelligence, with a focus on designing technologies with marginalized communities across Bangladesh, India, Canada, the USA, Pakistan, Iraq, Turkey, and Ecuador. He has published over 100 peer-reviewed articles, earned multiple best paper awards at CHI, CSCW, and ICTD, and received major honors and fellowships from Fulbright, Intel, Schwartz Reisman, Massey, Connaught, Microsoft, Google, and Facebook. His research is funded by NSERC, CIHR, SSHRC, NSF, NIH, and Bangladesh's ICT Ministry.

EBRAHIM BAGHERI is a Professor in the Faculty of Information at the University of Toronto. He specializes in Responsible Development of Artificial Intelligence, and contributes to the broad areas of Information Retrieval, Social Network Analytics, and Knowledge Engineering.

GEOFFREY ROCKWELL is a Professor of Philosophy and Digital Humanities at the University of Alberta where he holds a Canada CIFAR AI Chair. He has published on artificial intelligence and ethics, philosophical dialogue, textual visualization and analysis, digital humanities, computer games and multimedia. His books include *Hermeneutica*, co-authored with Stéfan Sinclair (MIT Press, 2016) which is part of a hybrid project with Voyant Tools (voyant-tools.org). He recently co-edited *Right Research: Modelling Sustainable Research Practices in the Anthropocene* (Open Book Publishers, 2021) and *On Making in the Digital Humanities* (UCL Press, 2023).