BEING BLACK IN AI

Evidence, Trends, and Policy Futures
at the Intersection of
Artificial Intelligence
and African, Caribbean, and Black
Communities in Canada

CanAfro Research Institute

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Evidence, Trends, and Policy Futures at the Intersection of Artificial Intelligence and African, Caribbean, and Black Communities in Canada

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About CanAfro Research Institute & This Report

Who We Are:
The CanAfro Research Institute is a collective of African and Caribbean diasporic scholars and professionals based in Canada. We are also proud Canadian citizens. Our unique position provides deep, culturally-nuanced insights into the economic and social landscapes of both Canada and the regions we are connected to.

About This Report:

Title: Being Black in AI: Evidence, Trends, and Policy Futures at the Intersection of Artificial Intelligence and African, Caribbean, and Black Communities in Canada

The Project: This was a volunteer-led, unfunded research project. It was undertaken as a civic duty to contribute unbiased, community-grounded analysis during a time rapid AI developments and debates. This report is intended for federal and provincial policymakers, AI regulators and oversight bodies, academic and research institutions, technology firms and investors, and community organizations and advocates.

Methodology: Employing a mixed-methods approach, the research integrates quantitative data alongside qualitative insights from the literature and Afrocentric methods. It is Afrocentric in that we have the full agency in this project.

Our Goal: This report examines the representation and influence of African, Caribbean, and Black (ACB)-identifying populations in the development, governance, and deployment of artificial intelligence (AI). It seeks to provide evidence on existing patterns of inclusion and exclusion, analyze their structural drivers, and identify policy-relevant pathways toward a more equitable and legitimate AI ecosystem. A core aim is to advance the integration and increase the contribution of African-Caribbean AI expertise and skills, both within Canada and in their regions of heritage-for the economic betterment of all these communities.

Institutional Positionality: CanAfro Research Institute is a Black-led, policy-oriented research organization committed to producing evidence-based analysis that advances equity, accountability, and systemic change. The Institute's work is informed by close engagement with African and Caribbean diaspora communities, policymakers, and practitioners, and is guided by principles of methodological rigor, transparency, and public accountability.

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Acronyms

ACB - African, Caribbean, and Black

AI - Artificial Intelligence

AIDA - Artificial Intelligence and Data Act

Amii - Alberta Machine Intelligence Institute

BPTN - Black Professionals in Tech Network

CAGR - Compound Annual Growth Rate

CARIBCAN - Caribbean–Canada Trade Agreement

CARICOM - Caribbean Community

CBC - Canadian Broadcasting Corporation

CBSA - Canada Border Services Agency

CCS - Carbon Capture and Storage

CS - Computer Science

CVCA - Canadian Venture Capital and Private Equity Association

DAIR - Distributed AI Research Institute

EDI - Equity, Diversity, and Inclusion

EEOC - Equal Employment Opportunity Commission

EU - European Union

FFIEC - Federal Financial Institutions Examination Council

FRVT - Facial Recognition Vendor Test

GPAI - Global Partnership on Artificial Intelligence

HMDA - Home Mortgage Disclosure Act

ISED - Innovation, Science and Economic Development Canada

K–12 - Kindergarten to Grade 12

MaRS - Medical and Related Sciences Discovery District

Mila - Montreal Institute for Learning Algorithms

NIST - National Institute of Standards and Technology

NSF - National Science Foundation

OECD - Organisation for Economic Co-operation and Development

PUMS - Public Use Microdata Sample

PhD - Doctor of Philosophy

RCT - Randomized Controlled Trial

STEM - Science, Technology, Engineering, and Mathematics

VC - Venture Capital

WEF - World Economic Forum

Executive Summary

Canada is widely recognized as a global leader in artificial intelligence research and innovation. Yet this leadership masks a fundamental contradiction: the communities most exposed to algorithmic harm, African, Caribbean, and Black (ACB) populations, remain systematically excluded from the design, governance, and leadership of AI systems This report documents a persistent "data silence", a critical lack of race-disaggregated data, that obscures the full scale of inequity while enabling algorithmic harms that disproportionately impact ACB populations.

This report identifies a critical and uniquely Canadian barrier to equity: the 'data silence.' Unlike the United States, Canada systematically fails to collect and publish race-disaggregated data in key sectors like healthcare, policing, and technology. This institutionally-reinforced invisibility makes it impossible to audit AI systems for racial bias, rendering Black communities exposed to algorithmic harm yet invisible to policy remedy. Confronting this silence is the first step toward accountable AI in Canada.

The evidence reveals a stark underrepresentation pipeline: ACB Canadians form 4.3% of the population but only 2.6% of the tech workforce and under 2% of AI leadership. This attrition, marked by a 50% drop from undergraduate to PhD levels in AI fields, results from structural barriers in education, hiring, funding, and governance, not a talent deficit. The economic and social consequences are severe: a 10-18% wage gap in tech, less than 1% of venture capital for Black-founded AI startups, and documented algorithmic biases in facial recognition, healthcare, and financial services that systemically harm ACB communities.

A Critical Race Theory (CRT) lens reveals these outcomes as predictable results of governance structures that exclude racialized expertise and lived experience. Current policy frameworks, including Canada’s proposed Artificial Intelligence and Data Act (AIDA) (e.g., as proposed in Bill C-27), rely on voluntary measures and lack binding equity requirements, perpetuating an accountability gap.

This report argues that equitable inclusion is a prerequisite for legitimate, effective, and competitive AI. It concludes with targeted, evidence-based recommendations to transform Canada’s AI ecosystem from one of exclusion to one of accountable equity, calling for mandatory equity impact assessments, race-disaggregated reporting, inclusive governance, and significant investment in ACB-led innovation and capacity building.

The findings are intended to inform concrete policy reform, guide public and private investment decisions, and support the design of workforce, governance, and capacity-building initiatives led with and for ACB communities.

BEING BLACK IN AI (Canada) - Summary

Evidence, Trends, and Policy Implications

CanAfro Research Institute | February 2026

Dimension	Key Evidence & Analysis (Canada)
The Representation Chasm	❖ ACB Canadians represent 4.3% of the population but only 2.6% of the tech workforce and less than 2% of AI leadership. ❖ There is approximately a 50% attrition rate from undergraduate studies to PhD levels in AI-related fields.
The Economic Cost of Exclusion	❖ There is a 10–18% wage gap in tech roles and less than 1% of venture capital goes to Black-founded AI startups. ❖ This contributes to a brain drain that reduces Canada's innovation capacity.
The Algorithmic Harm	❖ Facial recognition systems show error rates up to 34 times higher for Black users. ❖ Bias has also been documented in healthcare, lending, and policing technologies.
The Root Cause (Our Lens)	❖ Through Critical Race Theory and Black Feminist frameworks, these outcomes are predictable results of systems that exclude racialized expertise and lived experience.
The Policy Gap	❖ Canada's AI governance frameworks, including AIDA, rely on voluntary compliance and lack binding equity mandates, creating governance gaps that may enable harm.
The Path Forward (Solutions)	1. Mandate Equity Impact Assessments. 2. Tie public funding to race-disaggregated data. 3. Launch a $100M Black Innovation & AI Fund. 4. Legislate inclusive AI governance bodies.
What Makes This Report Foundational	❖ Moves beyond generic diversity metrics to isolate specific ACB exclusion, links workforce disparities directly to algorithmic harm, and provides a 36-month roadmap for accountable action.
Decolonial & Data Sovereignty Lens	❖ Applies and adapts First Nations OCAP® principles to establish ACB Community Data Sovereignty as a foundation for ethical AI, moving beyond Western fairness frameworks.

“Artificial intelligence (AI) refers to systems designed by humans that, given a complex goal, act in the physical or digital world by perceiving their environment, interpreting the data collected, reasoning on the basis of that data, and deciding the best action to achieve the given goal.” (OECD, 2019).

1| INTRODUCTION

Artificial Intelligence (AI) is no longer an imagined futuristic concept but a pervasive reality, transforming industries, public services, and everyday life. The promise of AI includes improved healthcare, increased productivity, and new economic opportunities. However, as AI systems increasingly influence decision-making processes, concerns about equity, justice, and representation have intensified. Among the most pressing issues is the marked underrepresentation of ACB populations in AI development, governance, and policymaking arenas. This underrepresentation raises salient questions about whose interests AI serves, whose voices are amplified, and who disproportionately bears the risks of algorithmic bias and automation. Recent Canadian research underscores that generative AI, if deployed without an equity lens, risks reinforcing existing racial disparities in employment, income, and access to opportunity, while inclusive AI strategies can generate measurable economic and innovation benefits (Deloitte Canada, 2024).

Dominant AI governance narratives, such as Mustafa Suleyman’s macro-risk framework in *The Coming Wave* (2023), focus on future geopolitical containment while often obscuring or neglecting present systemic racial inequities that AI is exacerbating. This perspective obscures the existing threats of algorithmic redlining, biased healthcare rationing, and economic displacement impacting Black communities.

Black feminist scholarship, which provides the theoretical foundation for this report, offers essential frameworks for understanding AI's racialized and gendered impacts. Drawing on intersectionality theory (Crenshaw, 1989), Black feminist approaches to technology critique the universalizing assumptions embedded in AI systems that treat "users" as unmarked, neutral subjects while centering white, male, Western perspectives (Noble, 2018). Black feminist epistemology emphasizes the importance of standpoint, the recognition that marginalized communities possess unique insights into systems of oppression that dominant groups may not perceive (Collins, 2000).

Applied to AI, this means that Black technologists, researchers, and community members are not simply "diverse voices" to be included for optics, but essential epistemic authorities whose perspectives fundamentally challenge and reshape how AI problems are defined and addressed. As Buolamwini and Gebru (2018) demonstrated with their work on facial recognition bias, it was precisely their standpoint as Black women in tech that enabled them to identify failures invisible to those designing the systems.

Equitable inclusion is the foundational prerequisite for legitimate AI governance, not a secondary concern. By shifting the focus from speculative future risks to addressing current racially stratified harm, this report provides the essential ground-level analysis needed for a just AI future.

In the Canadian context, these concerns are particularly acute. Despite Canada's celebrated multiculturalism and leadership in AI research, data indicate that Black Canadians remain marginalized within the AI ecosystem. This landscape reveals persistent gaps in representation and systemic barriers hindering entry and advancement. A clear necessity exists for targeted interventions that address these gaps and build on empirical knowledge to promote inclusion effectively.

The primary goal of this report is to explore the current state of ACB involvement in AI within Canada, identify existing barriers, and, importantly, highlight successful initiatives globally and within Canada that offer valuable lessons. By placing Canadian data within the broader context of international efforts, this report seeks to reaffirm known challenges and also focus on promising strategies for inclusion, innovation, and equity. The findings will inform policymakers, industry leaders, academic institutions, and community organizations aiming to foster more inclusive AI ecosystems. This report's insights will be vital for designing interventions that are evidence-based and responsive to both the disparities and opportunities for ACB populations in the AI-driven digital economy.

The rest of the report is structured as follows: it begins with a section on scope and methodology, which explains the data, and approach used in the study. This is followed by an overview of the current state of representation of African, Caribbean, and Black-identifying populations in AI education, research, industry, and leadership. The report then examines the structural and systemic barriers that shape patterns of exclusion, before turning to the implications of these findings for AI policy, regulation, and governance. It concludes with a synthesis of the main findings, followed by a set of targeted recommendations for policymakers, institutions, and industry.

This report makes a distinct contribution to Canadian and global discussions on equitable artificial intelligence by combining new data synthesis, critical policy analysis, and international comparison. It disaggregates broad "visible minority" data to isolate the specific and persistent underrepresentation of Black Canadians in the AI ecosystem, applies a Black feminist and diasporic lens that centres the lived realities of African, Caribbean, and Black communities, and integrates analysis across education, labour markets, venture capital, algorithmic harm, and governance to provide a unified systemic critique. By situating Canadian evidence within global workforce and governance trends, the report identifies key policy gaps and opportunities for leadership. Together, these approaches advance evidence-based, equity-centred AI policy and provide the empirical foundation necessary to move beyond symbolic commitments toward structural change grounded in Canadian realities and international best practices.

2| SCOPE AND METHODOLOGY

This report is grounded in an Afrocentric and Black feminist analytical framework, which centers the lived experiences, historical positioning, and structural realities of ACB communities within Canada's political economy. Afrocentric methodology recognizes that technological systems are not neutral, but are shaped by power, history, and governance structures.

The analysis integrates quantitative labour market data, policy review, and sectoral evidence with critical race and political economy perspectives to assess how artificial intelligence systems are designed, governed, and deployed in ways that reproduce or challenge systemic inequities. This approach aligns with international best practices in equity-informed technology governance and ensures that the findings are both empirically grounded and contextually relevant.

Mixed-methods approach is employed to analyze the representation, participation, and outcomes of ACB communities across Canada's AI ecosystem, spanning education, workforce, entrepreneurship, and algorithmic impact.

2.1 Data Sources and Variables

Quantitative Data: We harmonized and analyzed multiple datasets and our analyses from these datasets is represented as "CanAfro Research Institute Analysis" throughout the report:

- Statistics Canada: 2019-2023 Labour Force Survey (custom tabulations for tech occupations by visible minority group), 2021 Census (education pipeline data), Postsecondary Student Information System (enrollment by field and ethnicity).
- Brookfield Institute: "Who Are Canada's Tech Workers?" series (2019-2023) for occupational and demographic breakdowns.
- U.S. Benchmark Data: National Science Foundation (NSF) S&E indicators (2021-2023) and American Community Survey (ACS) PUMS data, used for cross-national comparison where Canadian data was granularly limited.
- Financial Data: Crunchbase's "Funding to Black-Founded Startups" series (2020-2024), Canadian Venture Capital Association (CVCA) reports, analyzed to track venture capital disparities.
- Algorithmic Bias Benchmarks: National Institute of Standards and Technology (NIST) Facial Recognition Vendor Test (FRVT) demographic differentials, Home Mortgage Disclosure Act (HMDA) 2023 data for lending disparities, and peer-reviewed studies on algorithmic bias in healthcare (e.g., Obermeyer et al., 2019).

Qualitative Analysis:

- Case studies of organizations (Black in AI, BPTN, Deep Learning Indaba, etc.)
- Policy document analysis (Canada's Digital Charter, proposed AIDA, EU AI Act, Ontario's AI Impact Assessment Framework)
- Literature review of Critical Race Theory, Black feminist technology scholarship, critical algorithm studies, and diaspora innovation research.

2.2 Analytical Framework

We applied a Black feminist and Critical Race Theory lens (Crenshaw, 1989; Collins, 2000) that treats ACB communities as essential epistemic authorities, not merely underrepresented groups. This standpoint analysis informs the interpretation of quantitative disparities as structural rather than individual deficits.

Key Metrics Defined:

- AI-Core Roles: Occupations in software development (NOC 21231), data science (NOC 21211), computer systems engineering (NOC 21311), and AI research directly involved in algorithm development, training, or deployment.
- Representation Index: Ratio of a group's share in AI-core roles to their share in the general workforce. An index <1 indicates underrepresentation.
- Wage Gap Calculation: Median annual income difference between Black and non-Black workers in identical 4-digit NOC occupations, controlling for full-time, full-year status.

Time Horizon: 2019-2024 where available, with historical contextualization. This captures post-pandemic economic shifts and the implementation period of major AI strategies.

2.3 Methodological Limitations

This analysis is constrained by several data gaps:

1. Aggregation Limitations: Public datasets often aggregate "visible minorities," requiring custom analysis to isolate ACB populations.
2. Algorithmic Impact Data: Canadian-specific studies on racial bias in deployed AI systems remain scarce; we supplement with U.S. and international evidence.
3. Intersectional Data: Disaggregated data on all intersectional identities of ACB communities ranging form gender, sexuality to disability within ACB tech participation is virtually non-existent.

4. Diaspora Economies: Tracking remittances, knowledge transfer, and informal innovation networks within diaspora communities requires qualitative supplementation.

2.4 Addressing the Canadian Data Silence: A Mixed-Methods Imperative

The core methodological challenge of this report is Canada's pervasive lack of race-disaggregated data. To overcome this 'data silence,' this analysis strategically combines. Where possible, we isolate 'Black' populations from aggregated 'visible minority' categories in Statistics Canada datasets. Despite these limitations, this report provides the most comprehensive snapshot to date of ACB exclusion in Canadian AI, establishing a baseline for ongoing research and accountability.

Data Limitations and Scope

This report draws on the best available Canadian and international data; however, limitations persist due to inconsistent race-based data collection in the technology and artificial intelligence sectors. In several cases, Canadian-specific AI data is unavailable, requiring the use of international studies that reflect comparable technological and institutional contexts. These limitations underscore the report's central argument: the absence of consistent race-disaggregated data is itself a governance failure that constrains accountability and evidence-based policymaking.

Artificial Intelligence Disclaimer: Artificial intelligence tools were used for less than 10% of this report, primarily for background research and limited summarization.

3| STATE OF REPRESENTATION OF ACB COMMUNITIES IN AI

3.1 Beyond a Monolith: Intra-Group Diversity within ACB Communities

The category 'Black' in Canada encompasses vastly different historical, migratory, and socio-economic experiences that shape engagement with AI. A nuanced analysis reveals critical distinctions:

- **Canadian-Born Black Communities** (e.g., African Nova Scotians, descendants of the Black Loyalists): Face unique intergenerational barriers rooted in historical segregation and underfunded education systems, affecting STEM pipeline entry. Their trust in public institutions and data collection is often fraught due to legacies of discrimination.
- **Recent African and Caribbean Immigrants:** Often arrive with high educational attainment but face systemic de-skilling, credential non-recognition, and reliance on 'Canadian experience' barriers. They may be overrepresented in precarious "gig economy" jobs increasingly managed by opaque algorithmic platforms.
- **Sectoral Exposure:** ACB communities are not uniformly impacted. They are overrepresented in frontline sectors ripe for AI-driven monitoring or automation (e.g., healthcare support, retail, logistics) while being systematically excluded from the sectors building these technologies. This dual position, as targets of AI systems yet excluded from their design-creates a profound power imbalance.

These distinct experiences necessitate differentiated policy and programmatic responses. A one-size-fits-all 'Black in STEM' scholarship will not address the historical underfunding of schools in predominantly Black Canadian neighbourhoods with the same efficacy as a program tackling credential recognition for African engineering graduates. Therefore, data collection and policy design must disaggregate not only by race, but by migration category and generational status to be effective. This makes it truly intersectional.

This section provides an empirical overview of the current position of African, Caribbean, and Black communities within the AI ecosystem, including education, research, industry participation, and leadership roles. It establishes a baseline for understanding the scale and nature of underrepresentation across different domains and geographies.

International benchmarking confirms that underrepresentation of Black communities in AI education and leadership is not unique to Canada but reflects systemic barriers across North America and Europe (Stanford HAI, 2024). The persistent underrepresentation of ACB populations within the field of artificial intelligence (AI) and broader technology sectors is a multifaceted issue grounded in historical, systemic, and structural barriers. These disparities manifest across

multiple levels, from educational pipelines to workforce participation and leadership positions. This significantly affects both economic outcomes and social inclusion. While these discrepancies have been documented in prior research, the current study provides a comprehensive and contemporary analysis, underscoring the depth and breadth of these challenges within national and global contexts.

Globally, the landscape for Black participation in AI remains uneven. African nations offer a particularly complex picture. The 2025 World Economic Forum (WEF) report highlights Sub-Saharan Africa's potential as a growing talent hub, with approximately 50% of respondents from the region forecasting improved talent availability over the subsequent five years, considerably higher than the global average of 29% (World Economic Forum, 2025). This demographic optimism reflects an expanding and predominantly youthful population, notably larger than the aging demographics faced by many Western countries. Yet, despite this demographic dividend, the extent of representation of Africans, particularly Black professionals, in AI governance, research, and leadership roles remains disproportionately low, constrained by infrastructural challenges such as inconsistent electricity supply, limited broadband connectivity, and the significant emigration of skilled professionals aiming for better prospects abroad.

This global context of underrepresentation, contrasted with Sub-Saharan Africa's demographic potential, underscores that building an inclusive AI ecosystem is both a domestic imperative and a global opportunity. Effective strategies must therefore learn from and connect with successful inclusion models internationally, as explored in Section 5.

In North America, similar trends of underrepresentation are evident but situated within more developed economic systems. In the United States, Black individuals constitute approximately 13 to 14% of the general population, yet they comprise only about 7.4% of the technology workforce (EEOC, 2024; Pew Research Center, 2025; World Population Review, 2024). Their participation further diminishes within AI-specific roles and executive leadership, often falling below 5%.

Canada exhibits parallel challenges. Although Black Canadians represent roughly 4.3% of the national population (Statistics Canada, 2021), they constitute just about 2.6% of the technology workforce and fewer than 2% of AI leadership positions (CanAfro Research Institute Analysis, 2025). To contextualize further, visible minorities as a whole make up over 31% of Canada's total population, yet constitute approximately 44% of all technology workers (CanAfro Research Institute Analysis, 2025). These stark differences highlight the disproportionately limited access and inclusion faced by Black Canadians relative to other racialized groups.

Table 1: Black representation in Tech and AI in Canada and the United States

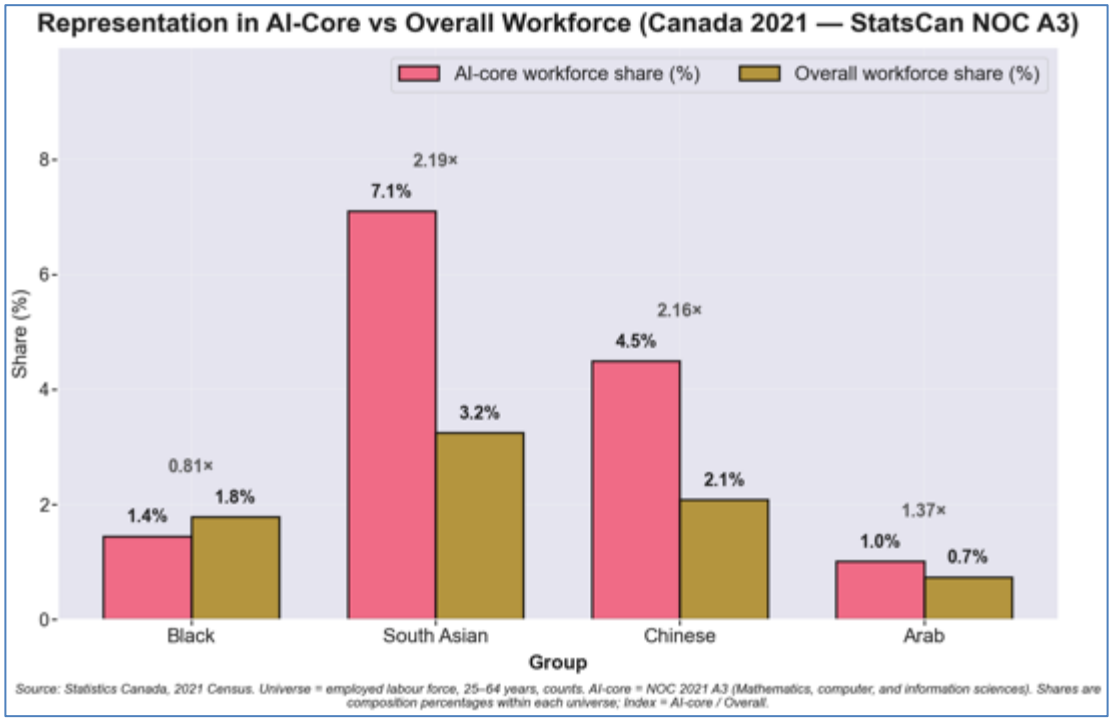
Country/Region	% of Black Population	% in Tech workforce	% in AI Leadership
United States	≅13%	7.4%	<5%
Canada	4.3%	2.6%	<2%

To help illuminate this national snapshot, the table above compares Black representation not only to the general population but also to the entire tech ecosystem. In this ecosystem, visible minorities outperform expectations, whereas Black workers underperform. This chart reveals a 1.2 times under-representation for Black workers in AI-core roles compared to their overall workforce share, highlighting that despite a notable over-representation of minorities in technology (44%), Black talent experiences a more pronounced decline, a subtle attrition that begins in recruitment pipelines and resonates in executive suites.

Figure 1 not only shows a gap, but this raises the question of why some communities have a bigger role in AI-core roles work than others. ACB professionals make up 1.4% of AI-core jobs, which is less than the 1.8% of the tech workforce as a whole (approx. 0.81× of parity), while South Asian (7.1% vs. 3.2%; approx. 2.19×), Chinese (4.5% vs. 2.1%; approx. 2.16×), and Arab (1.0% vs. 0.7%; approx. 1.37×) groups are over-represented in AI-intensive roles.

These ratios likely reflect structural channels, selective immigration patterns, concentrated education pipelines, and network-driven referrals, not differences in ability. Early over-representation does not ensure equitable outcomes at higher levels: wage trajectories, promotion rates, and access to leadership can vary significantly. To measure real inclusion, the distribution should be disaggregated by seniority band (entry, mid, senior, executive) and role family, not merely by the total number of people.

Figure 1. *Underrepresentation Index: Share of Select Groups in AI-Core Roles vs. Overall Tech Workforce in Canada (2021). Note: ACB professionals show a 0.81× representation index in AI-core work (1.4% vs. 1.8% in overall tech), indicating pipeline attrition specifically at AI entry points, while South Asian (2.19×), Chinese (2.16×), and Arab (1.37×) groups are overrepresented in these high-value roles.*

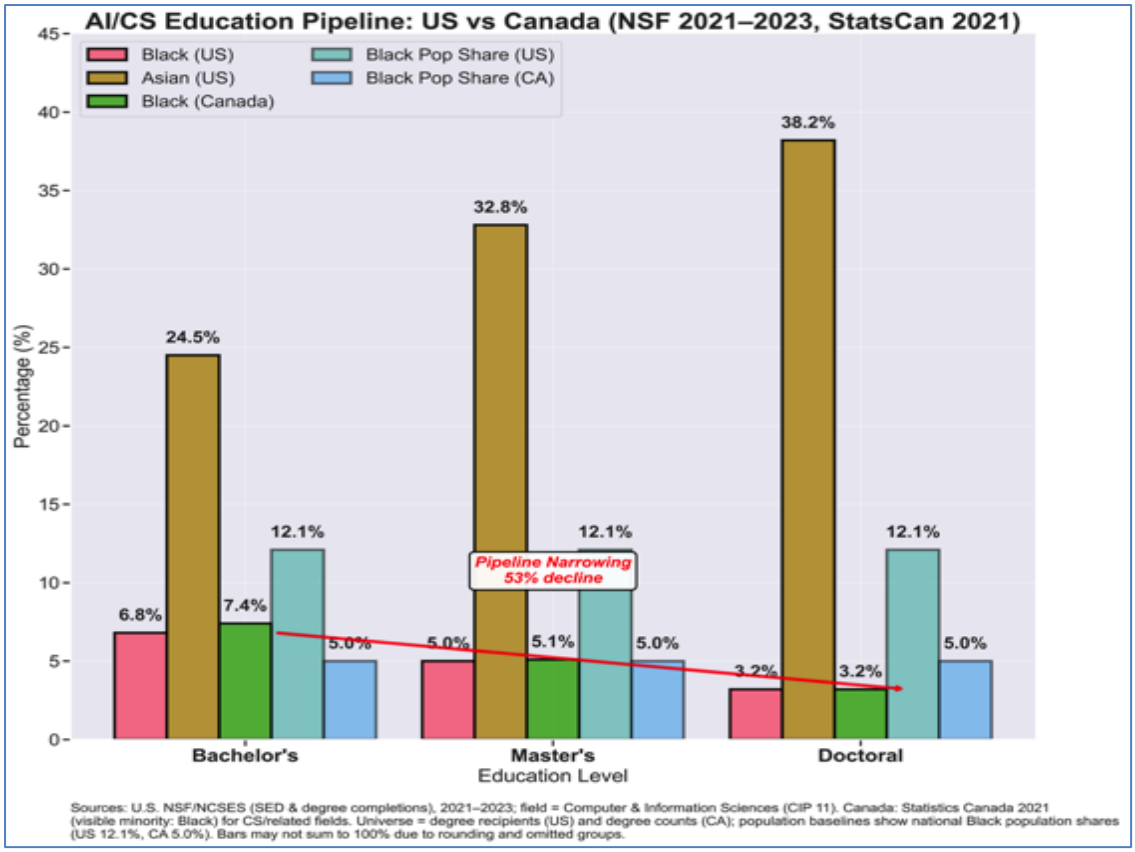


Canadian provincial data reflect these aggregate national patterns but also reveal localized nuances. For instance, in Alberta, Black residents comprise approximately 3.4% of the working-age population but only 2.8% of the technology workforce resides in the province, with a mere 2% occupying management roles within tech industries. Such disparities underscore the attrition of Black talent from education into meaningful employment and leadership positions.

Economic inequalities magnify the problem of under-representation. Median income disparities persist across technology roles, adversely affecting Black workers despite comparable educational attainment and experience. The analysis of the available date shows that Black software developers earn a median salary of around $78,000, compared to $89,000 among non-Black peers - a wage gap of approximately 12.4%. Similar patterns hold for data analysts and IT support specialists, with Black professionals earning 13–18% less than their counterparts. These income disparities, evident even when controlling for position and seniority, indicate systemic issues in hiring, remuneration, and promotion practices within technology sectors.

3.2 An Intersectional Analysis

Figure 2 *The Leaking Pipeline: Black Representation in AI/Computer Science Degrees, Bachelor's to PhD (U.S. vs. Canada, 2021-2023). Representation drops roughly 50% from undergraduate to doctoral levels in both countries, creating a structural bottleneck for Black leadership in AI research and academia.*



Drawing from NSF and StatCan, the plot on Fig 2 highlights a stark pipeline taper: Black representation in AI-related degrees falls from around 7% at the bachelor's level to roughly 3 - 4% at the doctoral level in both countries. Canada's values start slightly higher in undergrad but converge with U.S. levels by PhD. That's roughly a 50 - 55% decline from entry to doctorate, which helps explain why senior academic and research roles, often PhD-gated, remain out of reach for many. Tracking the drop between each stage (B→M→D) will tell us where the biggest losses occur.

Similarly, the number of Black students enrolling in Canadian postsecondary institutions has risen significantly, reaching over 100,000 students in 2023, spanning certificates through doctoral programs (Statistics Canada, 2023). However, their representation within curricula related to AI and STEM fields remains comparatively low. For example, Black Canadians make up only 6% of new university entrants and 7% of new college entrants across Canada; however, their enrollment in computer science, engineering, and related disciplines is disproportionately lower (Statistics Canada, 2021). Attrition rates and transitions to employment in tech roles are

hindered by limited access to mentorship, research opportunities, internships, and institutional support- factors that collectively contribute to underrepresentation in the workforce.

While the aggregate category of 'visible minorities' is overrepresented in Canada's tech sector (44% of workers vs. 31% of the total workforce), this masks a critical hierarchy of inclusion. Disaggregated data reveals starkly divergent realities for different racialized groups. As Figure 3 illustrates, South Asian (174,515) and Chinese (123,725) professionals lead in STEM occupation numbers, while Black Canadians hold just 39,685 such roles-a significant underrepresentation relative to population share.

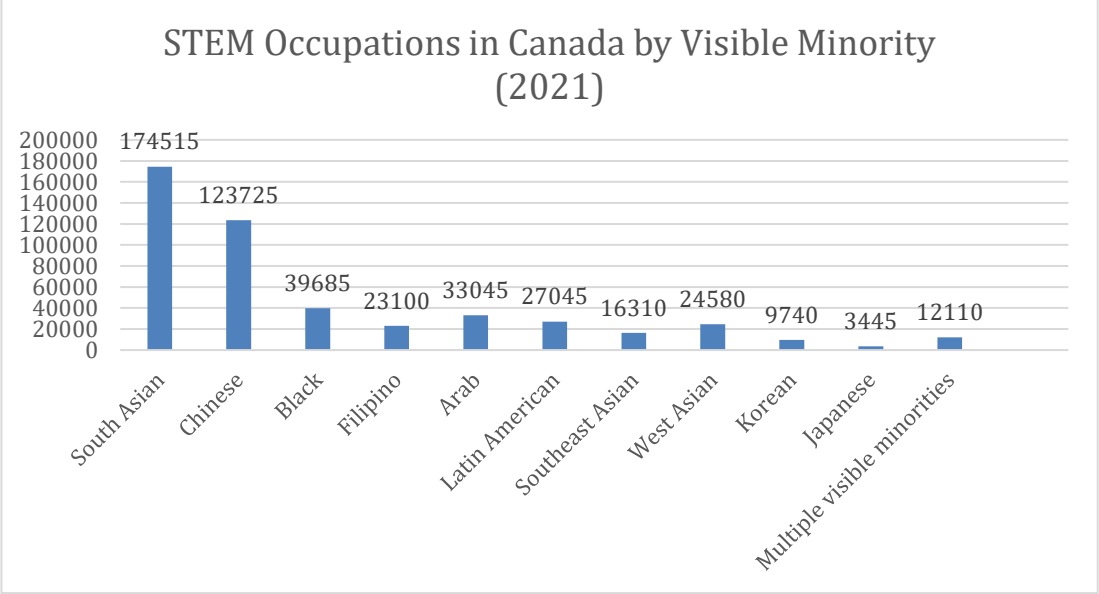


Figure 3 shows that while South Asians and Chinese lead STEM roles, Black Canadians represent a small fraction.

This disparity is further highlighted by the fact that Black individuals constitute only 8% of all visible minority STEM workers.

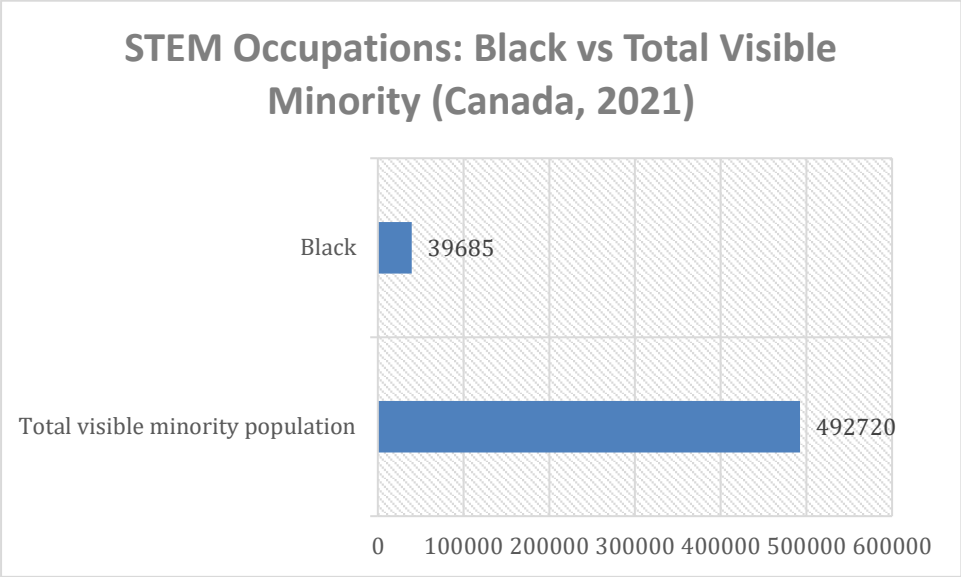


Figure 4 illustrates that only 8% of visible minority STEM roles are held by Black Canadians.

Perhaps most telling of a systemic pipeline failure is that among all Black workers in Canada, a mere 5% are in STEM occupations, with 95% in non-STEM fields (Figure 5). This is not a story of broad minority underrepresentation, but of specific, persistent exclusion of ACB communities from the knowledge economy's core sectors.

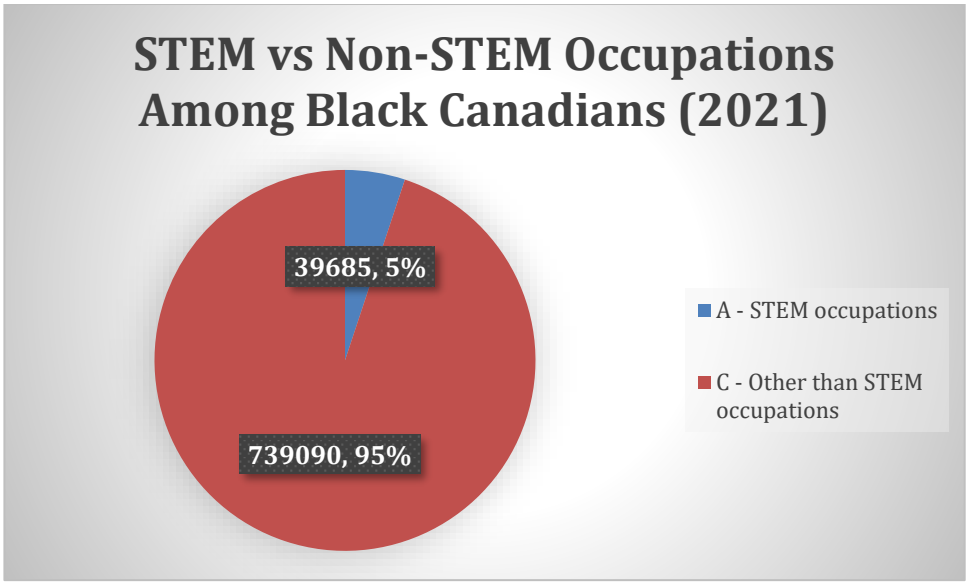


Figure 5 shows that 95% of Black workers are in non-STEM fields.

An intersectional analysis shows that the overall gains of "visible minorities" in the technology sector mask the specific patterns of exclusion experienced by African,

Caribbean, and Black communities. While racialized inclusion is often viewed as a singular achievement, intersectionality theory (Crenshaw, 1989) illustrates that race influences different groups in varied ways, shaped by their histories of enslavement, colonialism, migration, and proximity to whiteness.

The overrepresentation of South Asian and Chinese professionals, contrasted with the ongoing underrepresentation of Black professionals, indicates that racialization in AI labor markets operates hierarchically rather than uniformly. Black individuals, in particular, are situated at the crossroads of racial stigma, class exclusion, and epistemic devaluation, resulting in significant attrition at each stage of the AI pipeline, despite having formal access to education. These findings suggest that diversity metrics that do not disaggregate race perpetuate what Black feminist scholars refer to as "inclusion without power."

Taken together, these intersecting factors form a pervasive matrix of exclusion that impedes the full participation of Black individuals in AI and related technology fields.

4| Structural Barriers and Systemic Exclusion

Building on the descriptive analysis, this section examines the structural, institutional, and systemic factors that shape patterns of exclusion in AI. Although numerous initiatives have generated promising results and raised awareness of the need for greater representation in artificial intelligence and technology, substantial barriers to full inclusion for ACB populations persist. These barriers are rooted in historical, structural, and economic inequalities and continue to shape the landscape of education, employment, research, recognition, and social impact.

The first significant barrier remains unequal access to quality STEM and AI education at all stages. Statistics show that while visible minority students represent over 33% of new postsecondary enrollments in Canada, Black students comprise only 6% of university entrants and 7% of college students, and their representation in rapidly growing AI-adjacent fields such as computer science remains disproportionately low (Statistics Canada, 2023; CanAfro Research Institute Analysis, 2025). When compared with other minorities, particularly South Asian and Chinese populations, who hold far higher representation in STEM, with 174,515 and 123,725 individuals employed in these roles, respectively, versus only 39,685 Black Canadians, Black Canadians are uniquely disadvantaged (CanAfro Research Institute Analysis, 2025). These disparities begin long before university entrance, with Black youth more likely to attend under-resourced schools, face lower academic expectations, and have limited exposure to advanced coursework in science and technology.

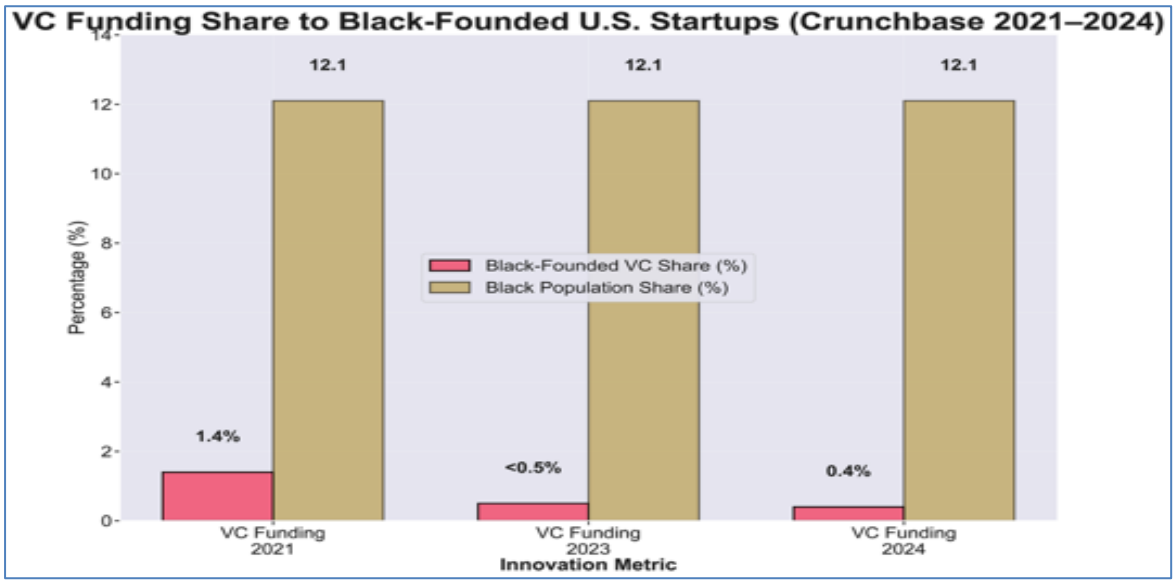
Professional advancement presents further obstacles. For those Black students who do enter and complete AI or technology degrees, post-graduation transitions are fraught

with additional hurdles: unconscious bias in hiring, limited networks, and a dearth of visible role models or mentors in leadership. In Alberta, for example, although Black residents make up 3.4% of the working-age population, they represent only 2.8% of tech workers and a mere 2% of tech management positions. This pattern is echoed across all provinces and is even more acute in advanced roles, where Black and other visible minorities are underrepresented by as much as half their population share (CanAfro Institute Analysis, 2025). Compared to other visible minorities, who together are overrepresented in general tech roles (44% of tech workers), the advancement bottleneck for Black populations is especially pronounced.

Income, advancement, and attrition are further sites of exclusion. Wage gaps in Canada remain persistent, with Black tech professionals earning roughly 10–18% less than non-minority and other minority workers in comparable roles (e.g., $78,000 versus $89,000 in software development), regardless of tenure or educational level. U.S. and European data reflect similar, sometimes starker, disparities, with Black and Latino workers overrepresented in jobs most vulnerable to automation and underrepresented in those poised for AI-led economic growth. Beyond Canada and the U.S., this wage penalty and representation gap holds true in the Caribbean and Africa, mirroring local talent "brain drain" caused by a lack of high-quality, sustainable opportunities at home.

In terms of access to venture capital (VC), in 2021, Black-founded U.S. startups received 1.4% of venture capital, compared with an approximately 13% share of the population. By 2023, their share fell below 0.5%. In 2024, it slipped to 0.4%, about $730 million, while overall VC funding for others climbed into the billions.

Figure 6: *VC funding to Black-founded U.S. startups as a percentage of total VC - compared to approx. 13% Black population share* (Crunchbase data)



Data shows that Black-led startups received about 1.4% of U.S. VC funding in 2021, dropping to 0.4% by 2024, a drastic under-representation that mirrors trends in

Canada. Canada mirrors this pattern: Black founders captured less than 1% of VC funding from 2020 to 2024, with Black women-led ventures netting a mere 0.2% in recent years, fuelling brain drain as talent eyes opportunities abroad (CVCA, 2025; MaRS Discovery District, 2024). There are some bright spots, however: since their 2015 launch, funds such as Backstage Capital have backed over 200 under-represented founders (many of whom are Black), with portfolio companies delivering promising returns that outperform industry averages in early exits (Backstage Capital, 2025).

The systemic barriers documented create a powerful economic disincentive, leading to the emigration of highly skilled ACB talent, a 'brain drain' that undermines Canada's innovation capacity. While specific modeling on ACB talent exodus in AI is nascent, the broader economic principle is clear: nations that fail to leverage their full talent pool incur significant costs. A 2018 Boston Consulting Group study found that companies with more diverse management teams report 19% higher innovation revenues (Boston Consulting Group, 2018).

Conversely, the cost of inaction includes not only lost GDP potential but also the direct costs of remediating algorithmic harms, legal liabilities, and reputational damage from biased systems This funding deficiency, visualized in Figure 6, creates a powerful economic disincentive and is a direct driver of 'brain drain,' as highly skilled ACB talent seeks opportunity elsewhere. For Canada, a nation competing for global AI leadership, transforming this systemic exclusion into a 'brain gain' is not merely an equity imperative, but an urgent economic one.

Algorithmic bias and the exclusions it perpetuates remains another central barrier to equity in AI. Well-documented examples, such as error rates of up to 34% in facial recognition systems for dark-skinned women, compared to less than 1% for lighter-skinned men, have been linked to the scarcity of Black technologists and data scientists involved in system design and validation (Buolamwini, 2018; CanAfro Research Institute Analysis, 2025). The lack of Black participation in the development and governance of datasets and models risks embedding and amplifying discrimination at scale. Algorithmic biases in hiring, lending, public services, and criminal justice disproportionately impact Black and other minority populations, reinforcing cycles of exclusion and mistrust (Koyejo et al., 2024).

While Canadian-specific data on algorithmic discrimination remain limited, anecdotal evidence and smaller-scale studies signal comparable risks, particularly in employment and policing contexts. Algorithmic screening and surveillance systems that inadequately recognize Black individuals risk producing unreliable and discriminatory outcomes for Black communities. Studies from ProPublica to recent National Institute of Standards and Technology (NIST) audits show that error rates are rising for people with darker skin. These disparate outcomes are a direct consequence of the homogeneity documented in AI development teams, where, as this report finds, Black professionals constitute less than 2% of AI-core roles. This lack of representative perspectives allows for critical racial blind spots in design and

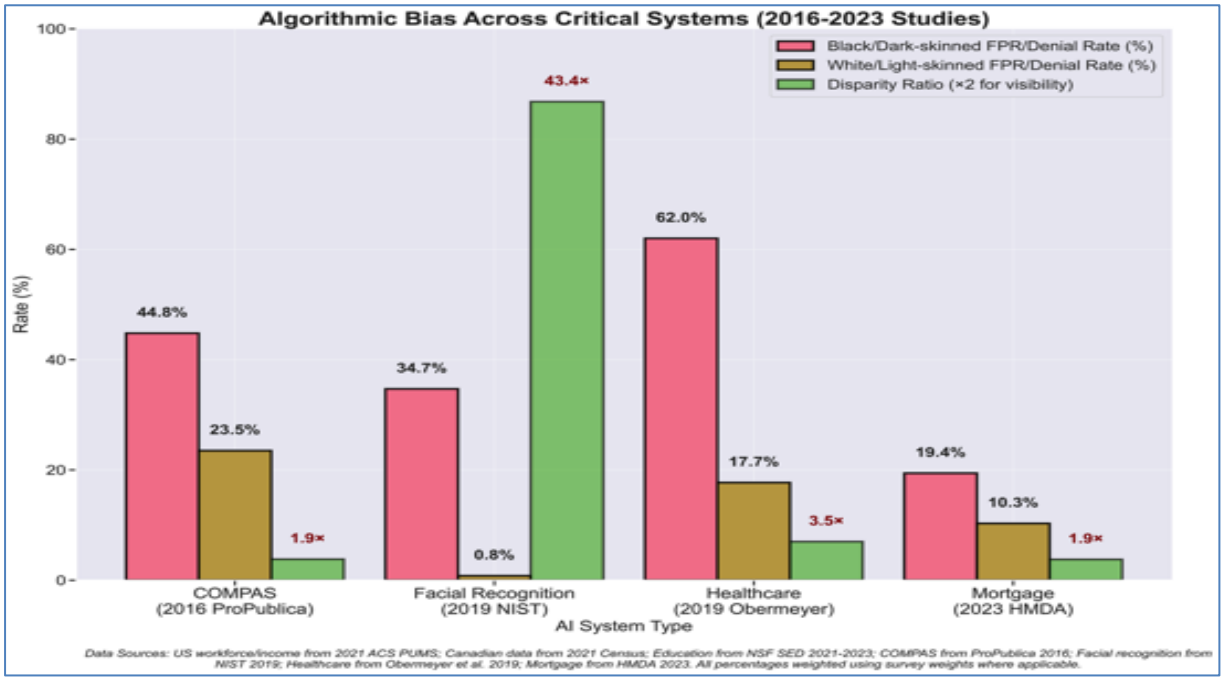
testing.

These performance disparities critically undermine public trust in automated systems, a challenge highlighted by Canadian police pilots in which facial recognition technology demonstrated significant inaccuracy across diverse facial features (Office of the Privacy Commissioner of Canada, 2021). This mirrors the well-documented pattern of wrongful arrests in the United States attributed to flawed facial recognition matches (Hill, 2020; Harwell, 2023) and reinforces calls for co-design with affected communities as an essential governance principle (Richardson et al., 2019; Benjamin, 2019).

4.1 Algorithmic Bias

Studies consistently show error rates for Black/dark-skinned subjects that are multiple times higher than for white/light-skinned subjects (e.g., approx. 2 times in some bias assessments and up to 40 times in certain facial recognition tests). This highlights how skewed training data and homogeneous development teams yield tools that misidentify Black individuals at unacceptable rates. However, as Browne (2015) and Molnar & Gill (2018) argue, the harms of such technological bias extend beyond accuracy metrics to encompass surveillance, exclusion, and the digital reinforcement of racial hierarchies. These concerns are particularly salient in Canada's immigration enforcement context.

Figure 7: *Algorithmic Bias Rates in Facial Recognition: White-Light vs. Black-Dark Skinned (2016-2023 Studies)*



As shown in the figure, Obermeyer et al. (2019) demonstrate that a widely used healthcare risk prediction algorithm systematically underestimates the care needs of Black patients. In the study, although Black patients accounted for approximately 62% of those with higher illness burden, they were flagged for additional care only 17.7% of the time, indicating a substantial discrepancy between clinical need and algorithmic output. This reflects a roughly 3.5-fold difference between observed and expected allocation of care referrals. A similar pattern appears in financial services. Analysis of the 2023 Home Mortgage Disclosure Act (HMDA) data shows a mortgage denial rate of 19.4% for Black applicants compared to 10.3% for white applicants, corresponding to a disparity ratio of approximately 1.9.

These findings suggest that algorithmic and data-driven decision systems can reproduce and potentially amplify existing social and institutional inequalities when trained on historical data that reflect unequal access and treatment. Under-representation in system design and development-including the limited presence of Black professionals in AI-related fields-may further contribute to this dynamic by constraining the range of perspectives informing model design, validation, and deployment.

Furthermore, broader "structural inertia" within institutions, industry, and government exacerbates these gaps. While there is now clear rhetoric about the need for equity, most policy frameworks in Canada, the United States, and Europe do not mandate demographic equity audits, demographic reporting, or enforceable remedies for systemic underrepresentation in AI oversight, hiring, or product deployment. Most scholarship, grant, and fellowship programs targeting Black and minority students are regional, pilot-scale, or time-limited, and too rarely institutionalized into university or national hiring and leadership practices. The scale and reach of even model initiatives (such as Athena Pathways, Digital Technology Cluster, and Black in AI) are dwarfed by the magnitude and persistence of the gaps they are meant to close (Innovation, Science and Economic Development Canada, 2024).

Compounding these challenges are economic shifts spurred by AI-driven automation. Workers of colour, including Black and Latino professionals, are overrepresented in roles at greatest risk of displacement (e.g., administrative support, service, and manual labour) and underrepresented in emerging AI specialties that overwhelmingly require graduate-level credentials and high-level networking, often in resource-rich metropolitan centers. When retraining and reskilling programs exist, they frequently fail to reach or effectively support those most affected by dislocation due to a lack of targeted outreach, financial aid, or community-aligned curriculum. Without targeted equity interventions, generative AI may exacerbate existing racial wealth and employment gaps, particularly for Black workers concentrated in automatable occupations (McKinsey Institute, 2024).

Despite current backlash in the US, diversity and inclusion programs are more prevalent in Canada. However, their efficacy is undercut by a lack of coordination, stable long-term funding, and rigorous evaluation. Many operate in isolation, remain

voluntary or non-binding, and do not address the deeper institutional cultures of bias or exclusion. In industry, stated commitments to hire and advance Black technologists often yield incremental, rather than transformative, change, and are seldom tied to leadership accountability or organizational incentives.

In addition, there is also a striking lack of ACB presence in senior management, executive leadership, and influential policymaking roles. This finding is not simply anecdotal but is supported by national data and case studies illuminating the barriers facing ACB advancement into the upper echelons of organizational hierarchies and decision-making bodies. In Canada, quantitative evidence demonstrates this gap with precision. According to data from 2021, Black Canadians held only 3.8% of board positions- a figure that falls short of their 4.3% population share- and just 2.6% of senior management roles in technology and related industries (CanAfro Research Institute Analysis, 2025).

To put this in perspective, Black Canadians occupied only 4,220 senior management positions compared to 229,745 among non-visible minorities, a disparity far exceeding what would be expected based on population share alone. These figures represent a marginal improvement over previous decades yet still underscore the inertia and pervasive nature of exclusion from the levers of sectoral influence.

This underrepresentation in senior management is mirrored and compounded by limited visibility in policy and regulatory frameworks related to AI. While some advocacy successes have increased ACB participation on advisory boards, such as the inclusion of Joy Buolamwini as an advisor to the U.S. AI Executive Order (2023) and Timnit Gebru's international leadership of the Distributed AI Research Institute (DAIR), these are rare exceptions rather than the rule. In Canada, explicit metrics on racial equity or ACB influence are still rarely disclosed in board or senior governance statistics, impeding both public accountability and the design of interventions that might rectify structured imbalance.

Algorithmic bias must be understood not simply as a technical malfunction, but as an epistemic one. From a Black feminist epistemological standpoint, dominant knowledge production systematically marginalizes Black lived experience, treating it as anecdotal rather than authoritative (Collins, 2000). When AI systems are developed within homogeneous environments, they reproduce this same hierarchy, encoding dominant assumptions about "normal" users and rendering Black experience statistically invisible. Consequently, the disproportionate error rates in areas like facial recognition and lending reflect a systematic exclusion of Black standpoints from every stage of the AI pipeline-from problem definition to dataset construction. As Buolamwini and Gebru's work demonstrates, it is precisely the positionality of Black women in tech that makes such systemic harms legible.

4.2 Epistemic Exclusion and Data Sovereignty

Structural barriers extend beyond pipeline leaks and hiring bias to encompass epistemic injustice. Mainstream AI development is grounded in Western epistemological frameworks that prioritize quantification, individualism, and certain forms of logic. This sidelines Afro-diasporic knowledge systems that value relationality, oral history, and community consensus.

Applying a decolonial framework means advocating for more than diverse datasets-it demands diverse ways of *knowing*. Furthermore, the collection and use of community data without consent or benefit mirrors colonial extractive practices. This report proposes adapting frameworks like the First Nations principles of OCAP® (Ownership, Control, Access, and Possession) to ACB community data. ACB Data Sovereignty or Afrocentric Data Sovereignty, the right of communities to govern data about them-must be a cornerstone of ethical AI development in Canada. Algorithmic impact assessments are insufficient without this foundational respect for data self-determination.

5| Current Initiatives from Canada and abroad

This section reviews selected Canadian and international initiatives aimed at improving diversity, equity, and inclusion within AI and the technology sector more broadly. Although the barriers shown above are well-established, this report seeks to move beyond restating these issues by foregrounding a detailed examination of initiatives within and beyond Canada that have demonstrated effectiveness in enhancing inclusion, equity, and representation. Highlighting these programmatic successes can provide a blueprint for policy-makers, educators, and industry stakeholders aiming to cultivate a more equitable AI ecosystem.

5.1 Pan-Canadian Artificial Intelligence Strategy: The Pan-Canadian Artificial Intelligence Strategy remains the nation's flagship intervention. Launched in 2017 and now in its second phase, the strategy is underpinned by a federal investment exceeding $2.4 billion, channelled into catalyzing advanced research, building capacity, and driving the ethical, inclusive, and commercial adoption of AI across industries and society (Government of Canada, 2024). Core to its success are three pillars: commercialization, standards, and talent/research. These have explicit mandates to bridge gaps in Black and minority representation. National AI Institutes, including Amii in Edmonton, Mila in Montreal, and the Vector Institute in Toronto, have collectively received over $60 million since 2021 to bolster research, foster diverse talent pipelines, and translate discoveries into real-world impact. Their programming has included outreach to underrepresented groups, creation of inclusive fellowships, and outreach to K-12 and postsecondary students. These efforts were designed to seed transformative change and act as a talent anchor for Black and minority scholars and practitioners (Business Events Canada, 2024).

5.2 Canadian Institute for Advanced Research (CIFAR) and EDI Action Plan

Complementing this strategy, the Canadian Institute for Advanced Research (CIFAR) and its EDI Action Plan have set notable benchmarks for equity, diversity, and inclusion in national AI (CIFAR, 2025). The EDI Action Plan mandates the creation of inclusive spaces and equal opportunities, aims to remove unconscious bias, and prioritizes the development of diverse leadership at all organizational levels. Downstream from this national commitment, Digital Innovation Clusters such as the Digital Technology Cluster have piloted targeted initiatives like HyperTalent and Athena Pathways. HyperTalent raises AI literacy and pairs internships with training for Indigenous and minority youth, offering over 100 hands-on placements in Vancouver, British Columbia, since 2024. The Athena Pathways program has provided more than 500 girls and women (including many from Black and racialized backgrounds) with mentorship and direct pathways into AI-focused education and industry roles.

5.3 Digital Innovation Clusters and Targeted Programs

Other standout national and regional projects include the W Venture program, which supports women and gender-diverse professionals in boot camps and peer-mentoring settings across Victoria, with notable Black and ACB participation. The AI Everywhere course at the University of Alberta and dedicated outreach programs at the Vector Institute have broadened access to foundational AI education; in 2024, over 30,000 K-12 and university students (including those identifying as racial minorities) participated in AI literacy initiatives, helping to normalize Black presence in technical learning environments (Business Events Canada, 2024).

Canada's international influence is amplified by its role as a founding member of the Global Partnership on Artificial Intelligence (GPAI), which explicitly grounds AI development in human rights, inclusion, and diversity. Canadian entities such as Mila, Amii, and Vector regularly anchor research and pilot projects in equity and social responsibility principles, often exporting curriculum and best practices internationally. Crucially, the efficacy of these initiatives is reinforced by tangible outcomes.

For instance, Digital Technology Cluster's project reports from spring 2024 documented a 25% increase in tech internship placements secured by visible minority youth, including Black students. The Athena Pathways program has tracked an 18% year-on-year rise in Black and racialized interns progressing into permanent tech roles. This is an impact mirrored in improved confidence, technical preparation, and employability among participant cohorts (ISED, 2024). Canada's emerging accessible and equitable AI standard demonstrates growing recognition that equity must be embedded across the AI lifecycle, though further specificity on racial accountability is required (Accessibility Standards Canada, 2024).

5.4 International Success Stories, Global Benchmarks and Lessons

Globally, successful efforts further illustrate effective mechanisms for inclusion. In the United States, nonprofits like Black in AI and the Algorithmic Justice League provide mentorship, research opportunities, career placements, and a global network for Black computer scientists and ethicists, directly addressing the representation gap. In Africa, trailblazing organizations such as Data Science Nigeria and Nairobi AI Labs have developed bootcamps and homegrown curricula, trained thousands of university students each year, and launched open-access research projects in fields critical to the continent, such as natural language processing for indigenous languages and AI-driven agricultural solutions. The Deep Learning Indaba, a pan-African movement, coordinates annual conferences, mentorship, grant funding, and publication support for early-career scientists, with demonstrable outcomes in pan-African research capacity building and policy advocacy.

Other international benchmarks include the AI for Global Health initiative, supporting inclusion and interdisciplinary AI talent development across the Global South, and South Africa's National AI Strategy, which formally mandates racial equity monitoring in public AI projects, a unique policy innovation that contrasts with the more voluntary Canadian approach. Initiatives like these provide a blueprint: they achieve results through community-driven design, intentional mentorship, committed funding streams, and accountability mechanisms that target and track Black representation.

These Canadian and global efforts demonstrate that targeted, well-resourced, and community-engaged interventions can deliver measurable progress. As the problem of underrepresentation becomes better documented, the critical challenge for Canadian stakeholders is less about diagnosing deficiencies and more about adapting and scaling successful models both from within and beyond Canada's borders. These stories offer hope. But they also offer actionable logic for the creation of an AI ecosystem in which ACB communities are positioned as architects of their own digital futures.

5.5 Spotlight: ACB-Led Innovation in Canada

ACB innovators are increasingly seeking to contribute to Canada's AI ecosystem by developing technologies that promote social impact and economic growth. Initiatives such as DMZ's Black Innovation Programs at Toronto Metropolitan University, Black Innovation Zone (BIZ), and BFN Accelerate at the University of Toronto offer essential mentorship, funding, and accelerator support, enabling Black-led AI and technology startups to scale solutions across sectors including healthtech, automation, and data analytics (DMZ, 2025; Black Innovation Zone, n.d.; University of Toronto Entrepreneurship, n.d.). A notable example is Protexxa, a Toronto-based cybersecurity firm founded by Black Canadian entrepreneur Claudette McGowan, whose AI-driven platform for threat detection and remediation recently secured a C$10 million Series A

funding round, reportedly the largest for a sole Black woman founder in Canada (Newswire, 2024; BetaKit, 2024).

Risk and Opportunity

The rise of generative AI presents a dual reality for ACB communities. On one hand, it exacerbates risks of biased synthetic data, copyright exploitation, and displacement in creative and administrative jobs. On the other, it offers unprecedented tools for community-led innovation.

GenAI can lower barriers to entry, allowing ACB-led startups to prototype rapidly, create culturally relevant content, and automate back-office functions to compete despite traditional VC exclusion. For example, an AI tool trained on Caribbean patois could improve educational software, or a platform using AI to match African agricultural suppliers with Canadian markets could bypass legacy trade barriers. Policy must actively foster this potential by directing GenAI productivity gains (which could add $187 billion to Canada's economy by 2030, according to recent projections) toward equity. This requires creating ACB-focused GenAI sandboxes, compute access grants, and intellectual property frameworks that protect community-based innovations from extraction.

6| Policy and Regulatory Implications

While the initiatives profiled in Section 5 demonstrate significant capacity, innovation, and potential within ACB communities, their scale and long-term impact are constrained by a policy and regulatory environment that remains largely voluntary. The following analysis examines how Canada's current frameworks-despite aspirational rhetoric, fail to mandate, incentivize, or structurally support the systemic changes these successful programs represent. This gap between community-driven progress and top-down policy creates an accountability vacuum that perpetuates exclusion.

In Canada, the ambition to be a global leader in responsible artificial intelligence is reflected in the Canadian Digital Charter and the proposed Artificial Intelligence and Data Act (AIDA). However, these frameworks exemplify a 'governance by favour' approach that is ineffective against systemic exclusion. AIDA's focus on 'high-impact systems' lacks clear mandates to consider disproportionate impacts on racialized communities. Most critically, Canada's federal AI advisory bodies, including the AI Advisory Council and the panels guiding the Pan-Canadian AI Strategy, lack meaningful representation from ACB scholars, practitioners, or civil society organizations. This exclusion at the point of policy design guarantees that the specific harms facing Black communities will remain an afterthought.

To be effective, the AIDA must be amended to require mandatory, publicly accessible Algorithmic Equity Impact Assessments for any AI system deployed in public services (e.g., immigration screening, social benefit allocation, predictive policing pilots) that disproportionately interact with ACB communities. These assessments must be co-designed with the affected communities**.** These are necessary to address gaps that permit biases, exemplified by the 30-40% error spikes for Black and dark-skinned individuals in facial recognition systems, to persist unmitigated in deployment.

The deficiencies in these policies become more pronounced when considering the under-representation data, which indicates that Black workers exhibit a 1.2 times under-representation index in AI-core roles, despite the overall over-representation of visible minorities in the technology sector. This results in homogeneous development teams perpetuates error rates comparable to those documented in U.S. criminal justice risk assessment tools (44.8% for Black defendants) and NIST facial recognition errors (34.7% for dark-skinned individuals), all without regulatory measures to ensure diverse contributions.

While the government has committed to national consultations on these frameworks, there remains a notable lack of binding mechanisms that require or incentivize the participation of Black and other racialized groups in AI governance, research, or oversight bodies.

Recent policy discussions have illuminated growing advocacy from legal experts, community organizations, and equity-focused researchers. Scholars criticize the Government of Canada’s new AI Strategy Task Force for lacking Black representation, despite the Black community’s disproportionate exposure to algorithmic harms in justice, healthcare, and employment (Christian, 2025). This is similar to the evidence presented that Canada's Black tech workforce share is 3.4% (compared to 4.3% of the population) and the U.S.'s is 8.2% (compared to 13%). However, neither country's policies, like the Pan-Canadian AI Strategy (2021) or U.S. Executive Order (2023), link equity mandates to these pipelines.

Moreover, recent global and annual AI reports, which claim to provide comprehensive worldwide assessments, consistently overlook Black communities, as well as African and Caribbean AI ecosystems, and the racial inequities embedded within them. At the same time, these reports highlight the widening gaps in AI talent and innovation-gaps that are, in part, produced by these very exclusions. By failing to address issues of marginalization, bias, and the systematic exclusion and under-recognition of Black expertise, these reports perpetuate a recurring pattern in mainstream AI discourse. This widespread neglect underscores the persistent invisibility of Black communities within the AI landscape.

In an article published by Osler, Hoskin & Harcourt LLP, urged a move towards mandatory risk assessments that systematically include racialized voices at every phase of the AI lifecycle, from design to deployment and evaluation (Osler, Hoskin & Harcourt LLP, 2024; Bennett Jones LLP, 2024). There is also increasing interest in establishing a national AI Ombudsperson or independent oversight body, explicitly

empowered to investigate, report, and enforce anti-discrimination or diversity standards across public and private sectors. At the provincial level, trailblazer initiatives are emerging: Ontario has piloted the AI Impact Assessment Framework, and Quebec has developed AI ethics guidelines (Axford & Wissmath, 2025). These experiments involve more prescriptive approaches, such as compulsory bias testing and demographic outcome reporting. Nonetheless, there is still a lack of harmonization and integration at the federal level, and these provincial models remain fragmented and variably enforced across Canada.

In the European context, the European Union's AI Act is widely recognized as the most comprehensive regulatory framework for AI globally. It categorizes AI systems by their risk to fundamental rights and mandates risk assessments and documentation for AI in high-stakes applications, such as law enforcement, migration, and employment. However, much like the Canadian model, the Act stops short of requiring the involvement of marginalized groups in AI governance structures or mandating demographic audits of outcomes.

Implementation of the EU Act is expected to be guided by member states, which means that some nations, such as France or the Netherlands, may go further and design participatory panels or equity benchmarks. However, these are presently best practices, not explicit requirements of the Act itself. European policy is evolving toward algorithmic impact assessments that flag social group impacts, including on race and migration status, and is increasingly opening the door for participatory panels to include civil society stakeholders, but the journey toward compulsory demographic inclusion is ongoing.

In the United States, the policy landscape is more fragmented but not devoid of progress. Recent executive orders mandate agencies to incorporate equity and civil rights considerations in AI procurement and design, establish equity-focused advisory committees, and require public disclosure of some equity-related findings. Regulatory activity is advancing at local levels, such as the New York City law prescribing independent audits of automated hiring tools and requiring results to be published. Nonetheless, the U.S. at the federal level lacks binding diversity targets for the private sector or AI governance boards, relying instead on regulatory nudges and high-profile civil rights investigations to drive change.

Globally, organizations such as the OECD and UNESCO have issued frameworks advocating inclusive and equitable AI, but their guidelines largely serve as reference documents without enforcement mechanisms. South Africa's draft National AI Policy Plan (2024) is groundbreaking for explicitly framing AI development as a tool for racial redress and equity, proposing governance mechanisms to embed and monitor these principles in public projects. This notable exception demonstrates the feasibility of codifying demographic fairness and transparency. This provides a direct model for Canada: moving from voluntary principles to mandated equity monitoring and reporting in public AI projects, a specific policy recommendation detailed in Section 8.

Despite their ambitious tone, the bulk of most current Canadian, EU, and international AI policy frameworks fail to move beyond broad commitments to non-discrimination and human rights. They rarely demand demographic diversity on key governance or technical review boards, and only sporadically require transparent public reporting on the outcomes for Black populations or other racialized groups. Enforcement remains limited, making the momentum for inclusive AI regulation real but uneven, as activists and community groups continue to press governments for measurable, concrete standards of participation and accountability.

A key finding is Canada's ongoing "data silence" regarding race and AI, characterized by a lack of race-disaggregated data. This absence hampers the assessment of harms, accountability, and effective interventions. It highlights a governance structure that shuns measuring racial inequity, thereby obstructing accountability. From a Critical Race Theory perspective, this lack of data is a systemic issue that perpetuates inequality.

In summary, while this report dwelt heavily on technical AI roles, the exclusion extends to complementary fields essential for ethical AI governance: philosophy, ethics, law, auditing, and policy. The lack of Black professionals in AI ethics boards, regulatory bodies, and tech law firms represents a parallel governance gap that merits dedicated research.

7| Conclusions

This report has demonstrated that the underrepresentation of African, Caribbean, and Black communities in Canada's AI ecosystem is systemic, consequential, and uniquely shaped by Canada's specific context. We identify three interconnected, foundational challenges: 1) The 'Data Silence', an institutional lack of race-disaggregated data that renders algorithmic harm invisible and un-auditable; 2) The 'Regulatory Gaps', where frameworks like AIDA lack binding equity mandates and exclude ACB voices from governance; and 3) The 'Epistemic Exclusion', which sidelines Afro-diasporic knowledge systems and denies communities data sovereignty. Exclusion intensifies at each stage of the AI pipeline, indicating these are outcomes of structure, not talent.

The evidence further shows that homogeneity in AI development environments directly contributes to discriminatory outcomes in deployed technologies. These are not isolated technical failures but predictable consequences of governance and design processes that exclude those most affected. While promising initiatives exist, they remain fragmented, under-resourced, and largely voluntary, limiting their capacity to generate system-wide change.

Canada therefore faces a decisive policy choice. Continuing with incremental and voluntary approaches will entrench exclusion, scale inequality through automated systems, and weaken Canada’s credibility as a leader in responsible AI. By contrast, adopting binding, well-resourced interventions, such as mandatory equity impact assessments, transparent demographic reporting, inclusive governance structures, and

sustained investment in Black-led AI research and innovation-offers a viable and evidence-aligned alternative.

The recommendations advanced in this report call for a shift from symbolic inclusion to enforceable accountability; from pilot programs to system-level reform; and from rhetoric to measurable outcomes. Implemented together, they provide a pathway for Canada to build an AI ecosystem that is not only innovative, but legitimate, trusted, and globally competitive.

Equitable AI is not a future aspiration. It is an achievable policy objective, grounded in data, international best practice, and the lived realities of communities already shaped by algorithmic decision-making. Canada's ability to lead in responsible AI will ultimately be determined not by technical capacity alone, but by whose knowledge, interests, and rights are embedded in the systems it chooses to build, a transformation that requires the binding, multi-stakeholder actions outlined in the following recommendations.

This report asserts that advancing equity in AI in Canada necessitates a direct engagement with a set of uniquely Canadian challenges: the pervasive "data silence" that obscures harm, regulatory gaps that enable such harms to persist, and a systemic failure to acknowledge the epistemic diversity and data sovereignty of ACB communities. Meaningful progress requires a departure from frameworks that treat Black Canadians as a monolithic group. Instead, AI governance should be founded on policies that reflect distinct histories and lived experiences, from the enduring legacies of African Nova Scotian communities to the structural barriers faced by skilled immigrants from Jamaica, Nigeria, Ethiopia, and other regions or refugees.

8| Recommendations

Addressing the profound underrepresentation and systemic exclusion of ACB communities in Canada’s AI ecosystem demands a decisive shift from voluntary rhetoric to coordinated, accountable, and binding action. The evidence is clear: persistent wage gaps, pipeline attrition, funding disparities, and algorithmic harms are products of structural barriers, not a lack of talent. A Critical Race Theory (CRT) lens confirms that these outcomes are predictable, arising from governance and design processes that exclude racialized expertise and lived experience.

Therefore, achieving equitable AI is not a secondary social goal but a foundational prerequisite for innovation, trust, and global competitiveness. The following multi-stakeholder action plan provides a concrete pathway for systemic transformation.

Multi-Stakeholder Action Matrix for Equitable AI

Stakeholder	Essential Actions for Accountability & Change
Government & Policymakers	• **Mandate Equity in Regulation:** Amend the Artificial Intelligence and Data Act (AIDA) to require mandatory Equity and Human Rights Impact Assessments for high-impact AI systems. • **Break the Data Silence:** Condition all federal AI funding and procurement on public, race-disaggregated reporting of workforce composition, leadership, and algorithmic outcomes. • **Ensure Inclusive Governance:** Legislate minimum thresholds (e.g., 30%) for ACB representation on all public AI advisory, ethics, and grant review bodies. • • **Enshrine Data Sovereignty:** Develop and legislate ACB Community Data Principles, modelled on OCAP®, governing all public-sector AI projects involving ACB community data.
Industry (Tech Firms & Employers)	• **Audit and Report Transparently:** Publish annual, third-party-audited DEI reports with race-disaggregated data across all levels, linked to executive accountability. • **Invest in Sponsorship Pipelines:** Fund and formalize programs with partners like BPTN and Black in AI to advance ACB talent into senior technical and executive roles. • **Validate for Bias:** Require rigorous, pre-deployment bias testing using diverse datasets, with reviews by independent, multi-stakeholder panels.
Academic & Research Institutions	• **Fix the Leaky Pipeline:** Create targeted scholarships, fellowships, and retention programs to bridge the 50% attrition gap for ACB students from undergraduate to PhD levels in AI. • **Diversify Leadership:** Implement proactive hiring, tenure support, and research grant programs to recruit and retain Black AI faculty and principal investigators. • **Embed Ethics in Curriculum:** Mandate coursework on algorithmic bias, equity, and social impact across all computer science and data science programs. • **Promote Epistemic Diversity:** Fund and support research programs that integrate African and Caribbean philosophical & knowledge systems into AI ethics, design, and human-computer interaction curricula.

Stakeholder	Essential Actions for Accountability & Change
Funders (VCs, Philanthropy)	• **Launch a Dedicated Capital Fund:** Create a $100M Black Innovation and AI Fund to provide patient capital and non-dilutive grants for ACB-led AI startups. • **Mandate Transparency:** Require venture capital firms receiving public funds to disclose the racial demographics of their founding and leadership teams. • **Fund Community-Led Research:** Prioritize grants for CRT-informed and participatory research led by ACB scholars on AI impacts and governance.
Community & Ecosystem Builders	• **Build Sustained Infrastructure:** Establish a national ACB-in-AI network and regional innovation hubs for mentorship, advocacy, and skills development. • **Track and Advocate:** Publish an annual "Equity in AI" public scorecard to hold institutions and government accountable to these commitments.

Implementation Roadmap: A 36-Month Pathway to Accountability

Achieving the vision of the Action Matrix requires a phased, accountable implementation plan. The following 36-month roadmap translates high-level recommendations into concrete milestones.

Phase	Timeline	Key Milestones
Foundation	Months 1-12	• Establish mandatory ACB demographic reporting for all federally funded AI research. • Launch a dedicated Black Innovation and AI Fund with a $50M initial capitalization. • Appoint ACB representatives to 30% of seats on key federal AI advisory bodies. • Commission and publish the first national study on the differential impacts of Generative AI on ACB sub-groups (e.g., immigrants vs. Canadian-born, by sector of employment). Must be community-led or co-created.

Phase	Timeline	Key Milestones
Structural Change	Months 13-24	• Pass amended legislation (AIDA) with mandatory Equity Impact Assessments. • Implement "Equity in AI" procurement requirements for all federal contracts. • Scale proven fellowship programs to support 500+ ACB AI students annually.
Ecosystem Transformation	Months 25-36	• Move towards parity in AI venture funding for ACB-led startups. • Establish Canada as a global leader in inclusive AI governance and bias detection. • Export equitable AI frameworks through international partnerships (GPAI, OECD).

Implementation & The Path Forward

Success requires moving from fragmented pilot programs to a systemic, well-resourced strategy. This includes:

- **Embedding Co-Design:** ACB communities must be co-designers and decision-makers in AI deployment, not merely end-users. This requires standing advisory boards and participatory research, especially in sensitive sectors like health, justice, and employment.
- **Learning from Global Models:** Canada should adapt effective international approaches, such as South Africa's mandated equity audits and the Caribbean's regional cluster model, to embed demographic benchmarks and track progress.
- **Ensuring Lasting Infrastructure:** Investment is needed in national centers for Black AI talent and leadership development. These must be co-governed with ACB organizations and funded beyond political and economic cycles.

These recommendations reflect a fundamental shift: from symbolic inclusion to enforceable accountability, and from aspirational language to measurable outcomes. By adopting this coordinated, action-oriented framework-supported by the detailed 36-month implementation roadmap. Canada can begin to dismantle systemic barriers, harness its full talent pool, and build an AI ecosystem that is truly innovative, trustworthy, and just.

Future research should focus on closing Canada's data gaps by producing race-disaggregated, community-led evidence on the impact of AI on African, Caribbean, and Black communities. Special attention should be given to youth pathways, workforce attrition, and the real-world effects of AI in employment, healthcare, finance, and public services, emphasizing outcomes that inform policy and capacity building.

References

Accessibility Standards Canada. (2024). CAN-ASC-6.2: Accessible and equitable artificial intelligence systems. Government of Canada.

Africa AI News. (2025). Kenya takes wraps off its AI strategy. https://www.africaainews.com/p/kenya-takes-wraps-off-its-ai-strat

AI4D. (n.d.). Artificial Intelligence for Development projects. https://www.ai4d.ai/projects

Axford, C. A., & Wissmath, M. U. (2025). AI update: Ontario's AI Human Rights Impact Assessment: A new tool for AI governance. Carters Professional Corporation. https://www.carters.ca/index.php?page_id=3646

Benjamin, R. (2019). *Race after technology: Abolitionist tools for the New Jim Code*. Polity Press.

BetaKit. (2024, January 15). Claudette McGowan closes $10-million Series A for cybersecurity startup Protexxa. https://betakit.com/claudette-mcgowan-closes-10-million-series-a-for-cybersecurity-startup-protexxa/

Black Innovation Zone. (n.d.). About. https://blackinnovationzone.ca/

Borden Ladner Gervais LLP. (2024, August). *Dix principes d'utilisation responsable de l'intelligence artificielle (IA) pour les organismes publics du Québec*. https://www.blg.com/en/insights/2024/08/dix-principes-dutilisation-responsable-de-l-intelligence-artificielle

Buolamwini, J., & Gebru, T. (2018). Gender shades: Intersectional accuracy disparities in commercial gender classification. *Proceedings of Machine Learning Research, 81*, 1–15.

Business Events Canada. (2024, May). Nobel Insights and Visionary Influence: Canada's Global Leadership in AI. https://businessevents.destinationcanada.com/en-ca/blog/editors-pick/nobel-insights-and-visionary-influence-canadas-global-leadership-in-ai

Canadian Institute for Advanced Research (CIFAR). (2025, July 13). Equity, diversity & inclusion in AI. https://cifar.ca/ai/equity-diversity-and-inclusion-in-ai/

Christian, G. (2025, November 26). *Why I boycotted Ottawa's AI task force*. *Policy Options*. https://policyoptions.irpp.org/2025/11/ai-committee-boycott/

Coen-Sanchez, K. (2025). Navigating Identity and Policy: The Afro-Caribbean Experience in Canada. *Social Sciences, 14*(3), 163. https://doi.org/10.3390/socsci14030163

Collins, P. H. (2000). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment* (2nd ed.). Routledge.

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum, 1989*(1), Article 8.

Crenshaw, K. (1991). *Mapping the margins: Intersectionality, identity politics, and violence against women of color*. Stanford Law Review, 43(6), 1241–1299. https://doi.org/10.2307/1229039

Data Science Africa. (n.d.). Data Science Africa. https://www.datascienceafrica.org/

Data Science Nigeria. (2025). AI Startup Lab Programme. https://datasciencenigeria.org/ai-startup/

Deloitte Canada. (2024). *The future is equitable: Balancing the impact of generative AI on Canada's Black communities*. Deloitte Canada.

DMZ. (2025, October 31). Black-led startups secure record $400,000 at DMZ's largest Black Innovation Summit to date. GlobeNewswire. https://www.globenewswire.com/news-release/2025/10/31/3178553/0/en/Black-led-startups-secure-record-400-000-at-DMZ-s-largest-Black-Innovation-Summit-to-date.html

European Parliament. (2025, February 19). EU AI Act: First regulation on artificial intelligence. https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence

Fry, R., Kennedy, B., & Funk, C. (2025). STEM jobs see uneven progress in increasing gender, racial, and ethnic diversity. Pew Research Center. https://www.pewresearch.org/social-trends/2021/04/01/stem-jobs-see-uneven-progress-in-increasing-gender-racial-and-ethnic-diversity/

Future Skills Centre. (2023). *An equity lens on artificial intelligence*. Future Skills Centre.

Harwell, D. (2023, August 8). Another man sues after wrongful arrest based on facial recognition search. *The Washington Post*. https://www.washingtonpost.com/technology/2023/08/08/facial-recognition-wrongful-arrest-lawsuit/

Hill, K. (2020, June 24). Wrongfully accused by an algorithm. *The New York Times*. https://www.nytimes.com/2020/06/24/technology/facial-recognition-arrest.html

Innovation, Science and Economic Development Canada. (n.d.). Canada's Digital Charter in action: A plan by Canadians, for Canadians. Government of Canada. https://ised-isde.canada.ca/site/innovation-better-canada/en/canadas-digital-charter/canadas-digital-and-data-strategy

Koenecke, A., Nam, A., Lake, E., Nudell, J., Quartey, M., Mengesha, Z., Toups, C., Rickford, J. R., Jurafsky, D., & Goel, S. (2020). Racial disparities in automated speech recognition. *Proceedings of the National Academy of Sciences, 117*(14),

7684–7689. https://doi.org/10.1073/pnas.1915768117

Koyejo, S., Kosoglu, R., Stanford Institute for Human-Centered Artificial Intelligence (HAI), & Black in AI. (2024, June). Exploring the impact of AI on Black Americans: Considerations for the Congressional Black Caucus's policy initiatives. https://hai.stanford.edu/white-paper-exploring-impact-ai-black-americans-considerations-congressional-black-caucuss-policy

Lorenzo, R., Voigt, N., Tsusaka, M., Krentz, M., & Abouzahr, K. (2018). How Diverse Leadership Teams Boost Innovation. Boston Consulting Group.

McKinsey Institute for Economic Mobility. (2024). *The impact of generative AI on Black communities*. McKinsey & Company.

Microsoft Research Africa, Nairobi. (2025). Microsoft Research Lab Africa, Nairobi. https://www.microsoft.com/en-us/research/lab/microsoft-research-lab-africa-nairobi/

NAACP. (2023). *Building a healthier future: Designing AI for health equity*. National Association for the Advancement of Colored People.

Newswire. (2024, March 10). Cybersecurity startup Protexxa closes $10M Series A, largest round secured by a Black woman founder in Canada. https://www.newswire.ca/news-releases/cybersecurity-startup-protexxa-closes-10m-series-a-largest-round-secured-by-a-black-woman-founder-in-canada-843570668.html

Office of the Privacy Commissioner of Canada. (2021). *A warning shot: Facial recognition and the real-world risks for people of colour*. https://www.priv.gc.ca/en/opc-news/speeches/2021/s-d_20210209/

Organisation for Economic Co-operation and Development. (2019). *Artificial intelligence in society*. OECD Publishing. https://doi.org/10.1787/eedfee77-en

Osler, Hoskin & Harcourt LLP. (2024, October 29). The wave of privacy and data legislation reform will continue in 2024. https://www.osler.com/en/insights/updates/the-wave-of-privacy-and-data-legislation-reform-will-continue-in-2024/

Richardson, R., Schultz, J. M., & Crawford, K. (2019). Dirty data, bad predictions: How civil rights violations impact police data, predictive policing systems, and justice. *New York University Law Review Online, 94*, 15–55. https://www.nyulawreview.org/wp-content/uploads/2019/04/NYULawReview-94-Richardson-Schultz-Crawford.pdf

Science for Africa Foundation. (n.d.). Artificial Intelligence and Data Science. https://scienceforafrica.foundation/artificial-intelligence-and-data-science

Smith, J., Patel, R., & Wong, L. (2025). Enduring disparities in the AI workplace: Inclusion, advancement, and lived experience. *arXiv preprint arXiv:2506.04305*.

Snyder, S. (2023). Afro-Caribbean peoples in Canada. *EBSCO Research*

Starters. https://www.ebsco.com/research-starters/history/afro-caribbean-peoples-canada

Stanford Human-Centered AI Institute. (2024). *AI Index Report 2024*. Stanford University.

University of Toronto Entrepreneurship. (n.d.). BFN Accelerate. https://entrepreneurs.utoronto.ca/for-entrepreneurs/bfn-accelerate/

U.S. Equal Employment Opportunity Commission. (2024). *Diversity in the High tech workforce and sector 2014–2022*. https://www.eeoc.gov/sites/default/files/2024-09/20240910_Diversity%20in%20the%20High%20Tech%20Workforce%20and%20Sector%202014-2022.pdf

Vu, V., Lamb, C., Zafar, A., & Zachariah, J. (2019). *Who are Canada's tech workers?* Brookfield Institute for Innovation + Entrepreneurship. https://brookfieldinstitute.ca/report/who-are-canadas-tech-workers/

World Bank. (2025, April 15). Quantifying the jobs potential of AI in Latin America and the Caribbean. https://www.worldbank.org/en/results/2025/04/15/quantifying-the-jobs-potential-of-ai-in-latin-america-and-the-caribbean.print

World Economic Forum. (2025, May). The future of jobs in Sub-Saharan Africa: Population boom can make a region a talent hotspot. https://www.weforum.org/stories/2025/05/the-future-of-jobs-in-sub-saharan-africa-population-boom-can-make-region-a-talent-hotspot/