



AI BIAS DETECTION CANVAS FOR BLACK SCHOLARS:

**Identifying and Mitigating
Algorithmic Inequities**

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1. Purpose and Positionality

What is Happening

Your identity, discipline, and context influence how you interact with AI. Bias in AI tools often reflects systemic inequities, which may misalign with Afrocentric and decolonial approaches to knowledge production.

Questions to Ask

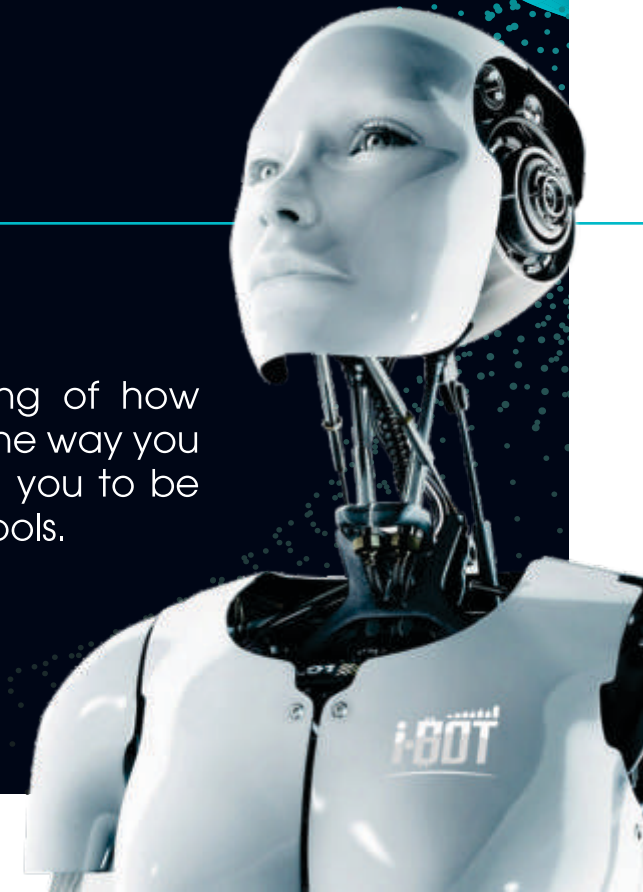
- ➔ How does my identity (as a Black scholar or African researcher) shape the biases I may detect in AI tools?
- ➔ Does this AI align with my commitment to representing African or marginalized knowledge systems?
- ➔ What historical or societal power dynamics might this AI reinforce or overlook?

What You Can Do

- Reflect on your positionality and the power structures that intersect with your work.
- Set clear goals for using AI, ensuring alignment with ethical, decolonial, and justice-oriented research practices.
- Use Afrocentric frameworks to critically assess how AI outputs relate to African perspectives.

What to Expect

A better, clearer understanding of how your identity and goals shape the way you engage with AI, and prepping you to be more intentional while using AI tools.



2. Understand AI's Colonial Legacy

What is Happening

AI systems always inherit colonial structures and frameworks that prioritize Western-centric data and epistemologies while marginalizing African or autochthonous voices. Historically, knowledge production has been dominated by Euro-American institutions, and this legacy is embedded in AI tools.

Questions to Ask

- Who created this AI tool, and whose interests or knowledge systems does it primarily serve?
- Does this AI reflect historical patterns of knowledge suppression and colonial hierarchy?
- How have past colonial knowledge systems shaped the data sources this AI relies on?
- What biases might result from the tool's reliance on Western academic norms or data sources?
- How might my research questions challenge or reinforce existing AI biases?

What You Can Do

- Investigate the colonial histories of knowledge production embedded in AI models.
- Push for decolonial approaches in AI research that incorporate Indigenous and African epistemologies.
- Critically examine AI's reinforcement of Western academic norms and demand alternative knowledge structures.

What to Expect

Deeper awareness of how AI reflects historical power imbalances and how this impacts the knowledge AI generates.



3. Frame Afrocentric Inputs

What is Happening

The way you craft your prompts significantly impacts AI outputs. Bias in responses often arises from vague, culturally disconnected, or loaded questions.

Questions to Ask

- ➔ Does my prompt request diverse perspectives, particularly from African contexts?
- ➔ Could my phrasing unintentionally lead the AI to prioritize Western perspectives?
- ➔ How can I ensure my question reflects inclusivity and neutrality?

What You Can Do

- Design prompts that explicitly ask for African, autochthonous, or marginalized perspectives.
- Test and refine your prompts to avoid loaded language or biases.
- Ask for comparisons between Western and African viewpoints to highlight disparities.

What to Expect

Balanced, contextually relevant outputs that incorporate diverse and inclusive perspectives.

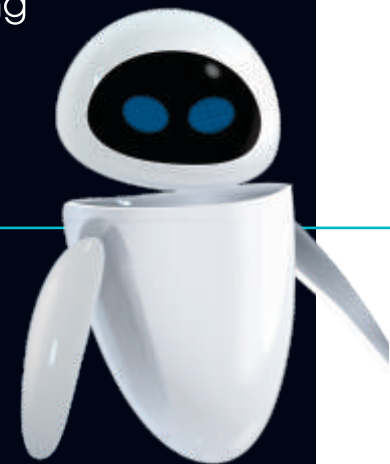
4. Detect Representational Bias

What is Happening

AI systems often misrepresent or stereotype African and Black identities, reinforcing harmful generalizations. These biases arise from limited or skewed training data.

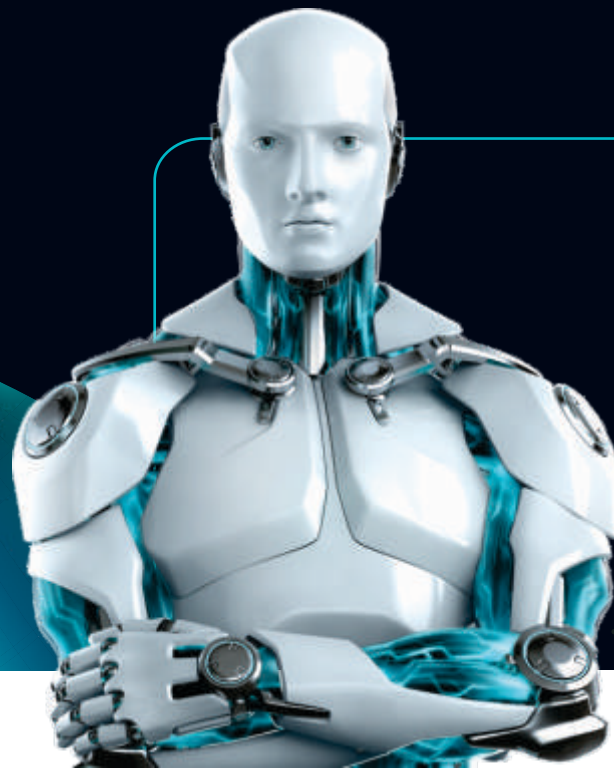
Questions to Ask

- Does the AI response contain subtle stereotypes about African or Black communities?
- Are African voices and perspectives underrepresented or misrepresented?
- How does the AI portray Africa—through deficit-based narratives or a holistic perspective?



What You Can Do

- Identify and document instances where AI outputs stereotype or erase African identities.
- Compare AI-generated content about Africa to local or academic sources to verify accuracy.
- Engage with AI ethics initiatives that challenge biased AI representations.
- Try different tools and see how the biases occur and/or are represented.



What to Expect

More awareness of how AI portrays African communities and tools to counter misrepresentations.

5. Assess Contextual Fairness

What is Happening

AI often misinterprets African cultural, historical, and societal contexts, leading to inaccurate or overly simplistic representations. For example, it may misinterpret or demonize African governance systems, traditional practices, or historical events.

Questions to Ask

- ➔ Does the response appropriately consider African cultural, historical, or societal contexts?
- ➔ Are there errors, omissions, or oversimplifications in the response when applied to African contexts?
- ➔ How does this output compare to validated sources in African contexts?
- ➔ What is emphasized and deemphasized?

What You Can Do

- Cross-check AI-generated content with African studies resources or lived experiences.
- Request clarification from AI when responses appear vague or lack cultural depth.
- Compare AI-generated narratives about Africa with those from African scholars and historians.

What to Expect

More contextually relevant outputs and tools to challenge Western-centric distortions in AI responses.



6. Examine Structural Bias

What is Happening

Beyond colonial history, AI development today continues to exclude African and Black perspectives. Underrepresentation in training data, lack of African linguistic diversity, and biased algorithmic benchmarks all contribute to systemic inequities in AI.

Questions to Ask

- ➔ Where does the AI source its training data, and who owns it?
- ➔ What voices and expertise were included in designing this AI system?
- ➔ What are the default socio-political contexts upon which algorithmic benchmarks are designed?
- ➔ Are the evaluation metrics used to measure AI performance inclusive of African epistemologies?

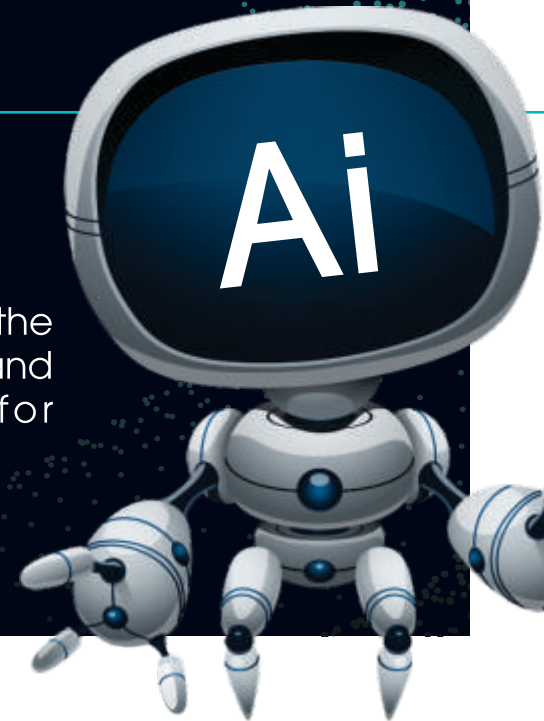


What You Can Do

- Research the provenance of the AI's datasets to uncover biases and gaps in representation.
- Identify and document missing African perspectives in AI training data and models.
- Advocate for the inclusion of African languages, cultures, and socio-historical contexts in dataset curation and model training.
- Push for transparency in AI dataset selection and model evaluation.
- Engage with African researchers, policymakers, and communities to develop AI systems that prioritize equity and inclusivity.

What to Expect

A more detailed understanding of the current biases in AI development and practical strategies to push for inclusivity..



7. Mitigate Bias in Outputs

What is Happening

The way you craft your prompts significantly impacts AI outputs. Bias in responses often arises from vague, culturally disconnected, or loaded questions.

Questions to Ask

- ➔ What gaps or imbalances exist in this response, and how can I address them?
- ➔ Can I refine my question to request a more balanced or nuanced response?
- ➔ What additional tools or resources can help correct these biases?

What You Can Do

- Rephrase prompts to request missing perspectives.
- Use external tools (e.g., bias-detection software) to analyze outputs.
- Manually edit or supplement AI-generated content with human insights.



What to Expect

Improved outputs that are fairer, more accurate, and aligned with your research goals.

8. Amplify Marginalized Voices

What is Happening

AI often silences marginalized voices by prioritizing dominant narratives.

Questions to Ask

- ➔ How can I amplify African voices or Black intellectuals in this research?
- ➔ Does this response cite or reflect contributions from African scholars?
- ➔ What overlooked perspectives could enhance the depth of this analysis?
- ➔ How does this AI system rank, prioritize, or exclude African knowledge sources?
- ➔ Are African research institutions and scholars credited appropriately in AI-generated outputs?
- ➔ What biases in citation algorithms might disadvantage African intellectual contributions?

What You Can Do

- Use AI to search specifically for African-authored works or autochthonous perspectives.
- Critically assess AI-generated references and cross-check for missing African contributions.
- Highlight overlooked African and Indigenous knowledge systems in your work.
- Advocate for AI datasets that equitably represent African intellectual traditions.
- Push for academic and AI systems that prioritize diverse, global sources rather than reinforcing Eurocentric canons.
- Engage directly with African scholars and research networks to co-create knowledge and challenge AI-driven exclusions.

What to Expect

Outputs that promote marginalized voices and produce more inclusive academic work.