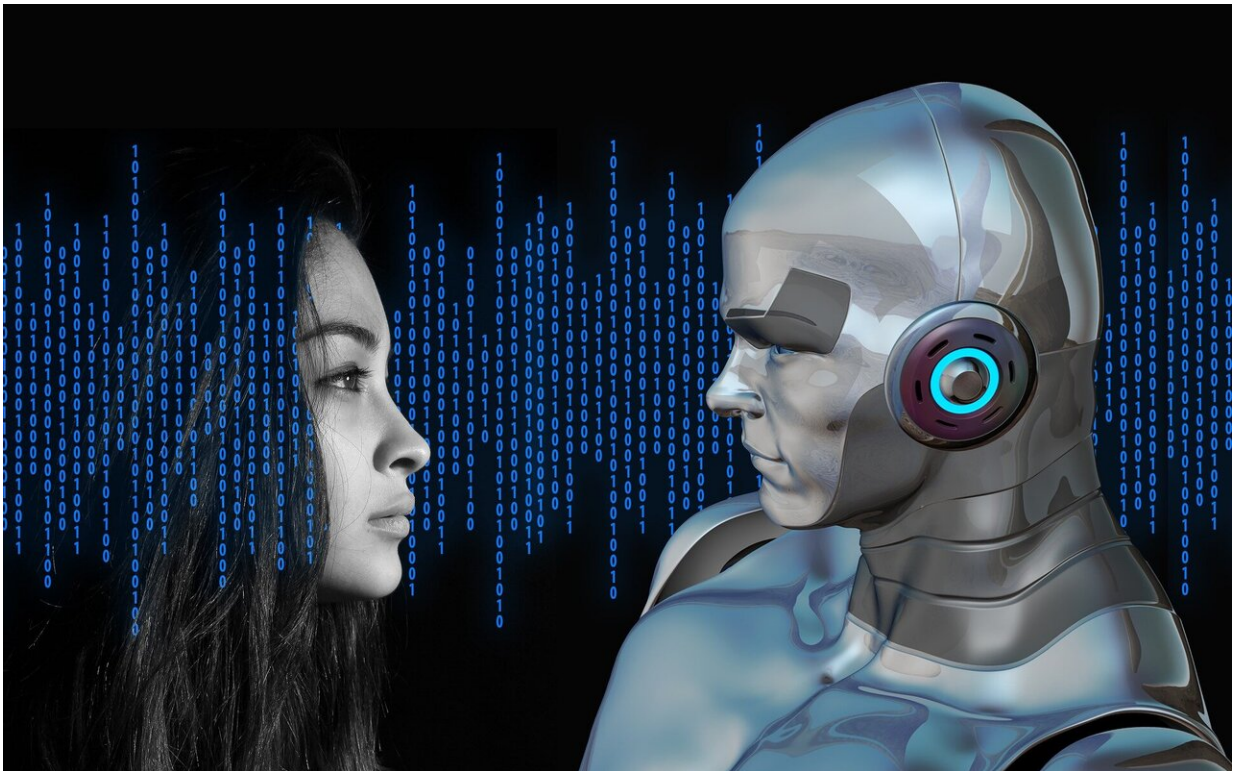


Whiteness of AI erases people of color from our 'imagined futures', researchers argue

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The overwhelming 'Whiteness' of artificial intelligence—from stock images and cinematic robots to the dialects of virtual assistants—removes people of colour from the way humanity thinks about its technology-enhanced future.

This is according to experts at the University of Cambridge, who suggest that current portrayals and stereotypes about AI risk creating a "racially homogenous" workforce of aspiring technologists, building machines with bias baked into their algorithms.

They argue that cultural depictions of AI as White need to be challenged, as they do not offer a "post-racial" future but rather one from which people of colour are simply erased.

The researchers, from Cambridge's Leverhulme Centre for the Future of Intelligence (CFI), say that AI, like other science fiction tropes, has always reflected the racial thinking in our society.

They argue that there is a long tradition of crude racial stereotypes when it comes to extraterrestrials—from the "orientalised" alien of Ming the Merciless to the Caribbean caricature of Jar Jar Binks.

But [artificial intelligence](#) is portrayed as White because, unlike species from other planets, AI has attributes used to "justify colonialism and segregation" in the past: superior intelligence, professionalism and power.

"Given that society has, for centuries, promoted the association of intelligence with White Europeans, it is to be expected that when this culture is asked to imagine an [intelligent machine](#) it imagines a White machine," said Dr. Kanta Dihal, who leads CFI's 'Decolonising AI' initiative.

"People trust AI to make decisions. Cultural depictions foster the idea that AI is less fallible than humans. In cases where these systems are racialised as White that could have dangerous consequences for humans that are not," she said.

Together with her colleague Dr. Stephen Cave, Dihal is the author of a new paper on the case for decolonizing AI, published today in the journal *Philosophy and Technology*.

The paper brings together recent research from a range of fields, including Human-Computer Interaction and Critical Race Theory, to demonstrate that machines can be racialised, and that this perpetuates "real world" racial biases.

This includes work on how robots are seen to have distinct racial identities, with Black robots receiving more online abuse, and a study showing that people feel closer to virtual agents when they perceive shared racial identity.

"One of the most common interactions with AI technology is through virtual assistants in devices such as smartphones, which talk in standard White middle-class English," said Dihal. "Ideas of adding Black dialects have been dismissed as too controversial or outside the target market."

The researchers conducted their own investigation into search engines, and found that all non-abstract results for AI had either Caucasian features or were literally the colour white.

A typical example of AI imagery adorning book covers and mainstream media articles is Sophia: the hyper-Caucasian humanoid declared an "innovation champion" by the UN development programme. But this is just a recent iteration say researchers.

"Stock imagery for AI distills the visualizations of intelligent machines in western popular culture as it has developed over decades," said Cave, Executive Director of CFI.

"From Terminator to Blade Runner, Metropolis to Ex Machina, all are

played by White actors or are visibly White onscreen. Androids of metal or plastic are given white features, such as in *I, Robot*. Even disembodied AI—from HAL-9000 to Samantha in *Her*—have White voices. Only very recently have a few TV shows, such as *Westworld*, used AI characters with a mix of skin tones."

Cave and Dihal point out that even works clearly based on slave rebellion, such as *Blade Runner*, depict their AIs as White. "AI is often depicted as outsmarting and surpassing humanity," said Dihal. "White culture can't imagine being taken over by superior beings resembling races it has historically framed as inferior."

"Images of AI are not generic representations of human-like machines: their Whiteness is a proxy for their status and potential," added Dihal.

"Portrayals of AI as White situates machines in a power hierarchy above currently marginalized groups, and relegates people of colour to positions below that of machines. As machines become increasingly central to automated decision-making in areas such as employment and criminal justice, this could be highly consequential."

"The perceived Whiteness of AI will make it more difficult for people of colour to advance in the field. If the developer demographic does not diversify, AI stands to exacerbate racial inequality," Dihal said.

More information: *Philosophy and Technology*, [DOI: 10.1007/s13347-020-00415-6](https://doi.org/10.1007/s13347-020-00415-6)

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