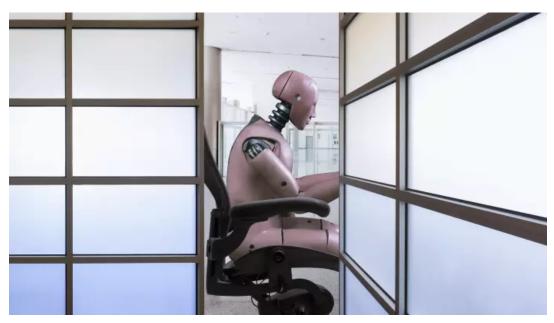**Women in Business**

Artificial Intelligence and Robotics

Beware AI programs recruiting staff in their own image

The latest hiring software aims to overcome inbuilt bias

The rise of AI in recruitment has raised concerns machines may mimic unconscious bias

YESTERDAY by Hannah Kuchler

Would you want to be hired by artificial intelligence? As recruiters embrace such technologies to sift candidates, I took a test that is given to entry-level bank analysts. I wanted to discover whether AI would be better at selecting women than an interviewer used to hiring young, male graduates from Oxford and Harvard — or would it replicate the bias against women and minorities?

Koru, which counts Deutsche Bank and Citigroup among its clients, surveys employees to discover their strengths and weaknesses. The software asks questions for which there is no obvious answer, such as "Which sounds more like you? — 'I will be able to achieve most of the goals that I have set for myself', or 'In uncertain times, I usually expect the best'".

The AI hiring company then asks applicants to take similar tests to see if they fit the organisation. Koru says these qualities can vary significantly between organisations, with most investment bankers in the same company having more skills in common than they would share with those in other banks.

Josh Jarrett, co-founder and chief product officer of Koru, believes AI can help employers to find candidates that have skills that go unrecognised because of the current hiring process.

"What I was excited to see is that women outperformed on several of those sub-competencies, [such as] emotional intelligence and teamwork, which is a notoriously hard thing to measure," says Mr Jarrett. Employers are more likely to interview those with a "high fit" score, so women may gain points for skills that do not come across as easily on a CV.

A new generation of AI recruitment technologies have been invented by companies from start-ups to Google. The latter says it built its machine-learning model using 17m job postings. Many sell their software as a way to bypass human bias, but they are also aware they need to keep an eye on their algorithms in case they, too, are biased.

AI is like a child imitating its parents' behaviour rather than doing what they say. It sucks in data, finds patterns and copies them. Although employers may say they want diversity, a recruitment program could instead follow the pattern of employers' human systems.

For example, if an AI tool examines data about a company's workforce — their experience, skills and performance — it could increase the number of white men if that is the trend, rather than considering more diverse candidates. If the people behind the AI have those same biases, that could also perpetuate them.

'AI isn't neutral': Y-Vonne Hutchinson

"We know that AI is not neutral," says Y-Vonne Hutchinson, founder of a start-up called ReadySet, which is devoted to increasing diversity in technology companies. "AI is designed by people and

those people have their own biases, and sometimes those biases get embedded into the tools and the platforms they use."

AI already has its first cautionary tale, she says. Some US courts started using predictive software to decide when to give prisoners parole, by calculating their risk of reoffending in a more consistent way. An investigation by ProPublica, the non-profit journalism organisation, found it was biased against African Americans, wrongly labelling them as future criminals at almost twice the rate of white defendants.

"What was supposed to be a bias mitigation tool ended up being a bias exacerbation tool. We risk seeing that happening in the hiring space as well," Ms Hutchinson says.

AI is designed by people and those people have their own biases

A Toronto start-up called Ideal uses AI to find thousands of candidates for entry-level positions. The start-up employs psychologist Ji-A Min as its head data scientist to monitor the decisions made by the software. The aim is to try to ensure that clients can comply with diversity rules, such as the US Equal Employment Opportunity Commission's regulations.

"Telling humans to ignore their unconscious bias is virtually impossible," she says. "Because the AI is training on historical data about human decision-making, it can start to replicate human bias if you are not monitoring the system. So if there is some kind of . . . bias, we go in and correct the principles we use."

As an African-American woman from a poor background, Stephanie Lampkin, chief executive of Blendoor, says she understands the potential negative effect of using historical data. She says there can be "accountability" problems and no real "quality assurance".

Her start-up is using data and AI to check the bias of human recruiters. Individual hiring managers are told if and when they tend to favour a certain type of candidate so they can be held accountable for their choices. "They can dig deeper and show [that] you favour white men between 25 and 30 who graduated from Stanford and have this degree," she says. Blendoor can recommend steps to correct the bias, such as attending a careers fair at a women's college or sponsoring an event at a conference focused on diversity.

On completing the Koru test, I was not convinced it had uncovered hidden skills to help an employer make an unbiased decision, matching me to the qualities it values rather than the white,

male faces they see in the corridor.

I scored most highly on "polish", otherwise known as communication skills, "curiosity" and "grit". I did badly on rigour — I sometimes make decisions based on gut feeling — and ownership (I apparently may be focused on my own success ahead of the team).

Luckily, my current team did not agree, so I will not have to submit to an AI recruiter any time soon.