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This is when a robot is going to take your job, according to Oxford University
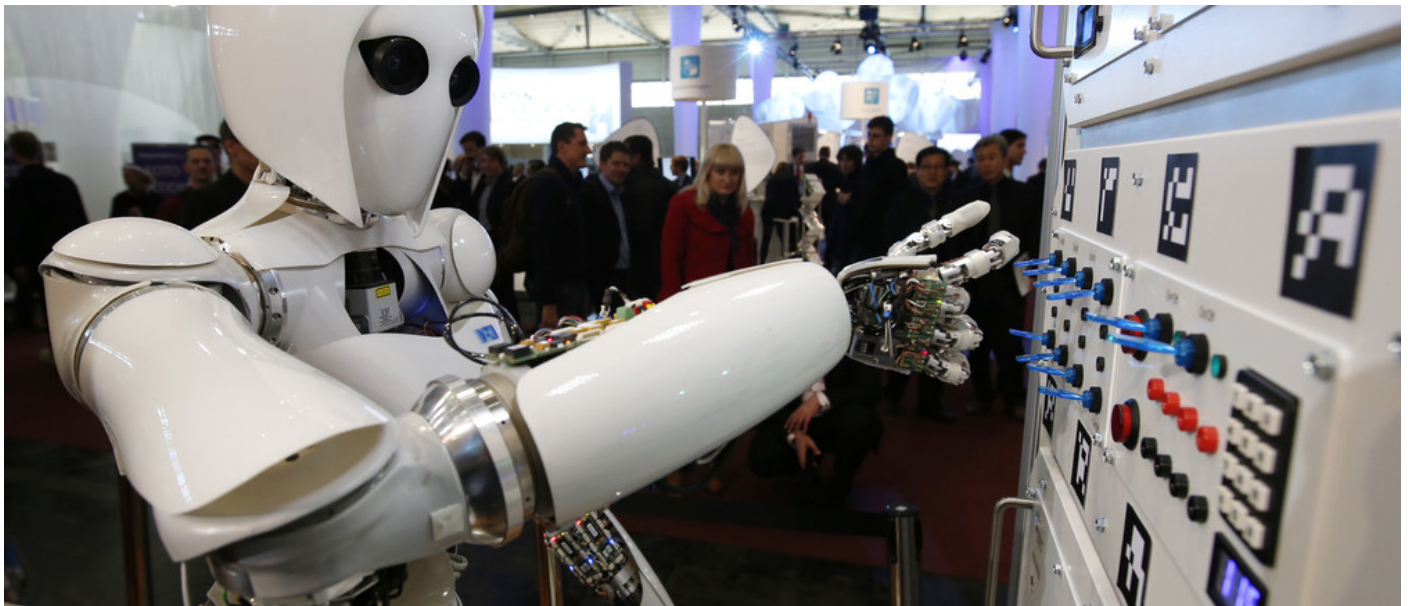
As automation ramps up throughout the economy, there is increasing anxiety about job security.
Image: REUTERS/Fabrizio Bensch

26 Jul 2017

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Formative Content

Worried that a robot will be able to do your job better than you? Artificial intelligence experts have predicted when this is likely to happen – and it's sooner than you might expect.

Katja Grace's team at the University of Oxford's Future of Humanity Institute contacted 1634 leading AI academics and industry experts from around the world to ask them when they thought intelligent machines would outperform humans at a variety of tasks and occupations, and when they would be superior at all tasks.

A total of 352 experts responded, and the researchers calculated median dates based on their predictions.

In the next decade, they expect AI to outperform humans in tasks such as translating languages (by 2024), writing high-school essays (by 2026) and driving a truck (by 2027).

However, robots will take longer to perform better than humans in jobs such as working in retail (by 2031), writing a bestselling book (by 2049) and working as a surgeon (by 2053).
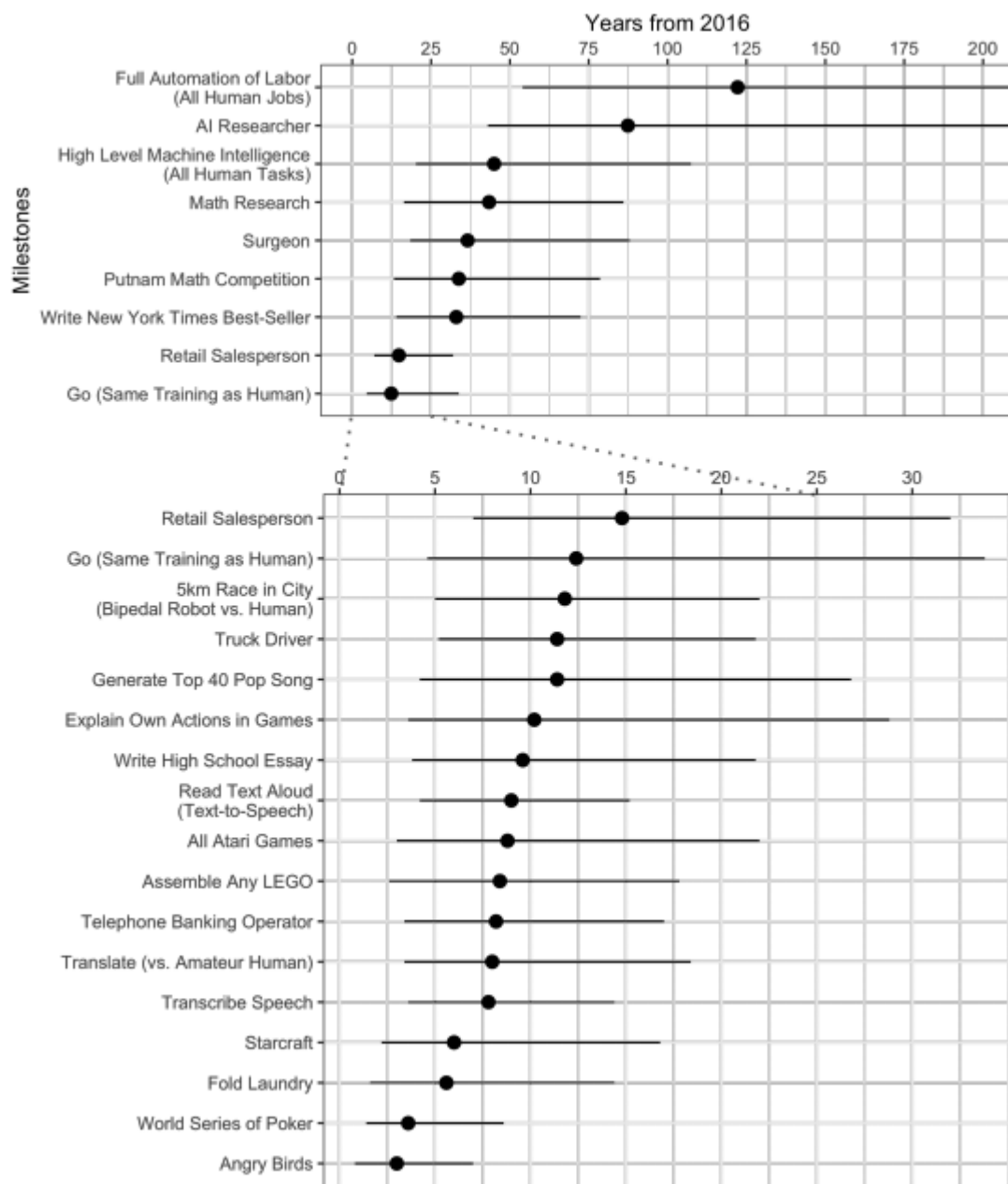

Image: Arxiv.org

The experts believed all jobs would be fully automated in the next 120 years, and that there is a 50% chance of AI outperforming humans in all tasks in 45 years – known as high-level machine intelligence, or HLMI.

There was a discrepancy, however, between what the Asian experts believed was possible compared to their North American counterparts. On average respondents in Asia thought HLMI was likely in 30 years, while North American researchers predicted it would happen in 74.

When it came to tasks of varying complexity such as playing Angry Birds, building Lego models and generating a Top 40 pop song, the experts thought AI could surpass humans within the next 10 to 15 years.

The nascent use of AI in areas such as recruitment, legal work and construction demonstrates that for a number of industries the concept of intelligent machines taking over, or at the very least working in conjunction with humans, is already happening.

The World Economic Forum's Future of Jobs report predicts that 5 million jobs will be lost by 2020 as AI, robotics, nanotechnology and other socio-economic factors replace the need for human workers.

Meanwhile, a growing number of experts have voiced concern about the impact of the automation of the workforce on humanity. Among them Professor Stephen Hawking who warned that it will "accelerate the already widening economic inequality around the world".

Governments, employers and educators are being urged to equip people with the skills they will need to work alongside robots, rather than compete with them in the future workplace.

Written by

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The views expressed in this article are those of the author alone and not the World Economic Forum.

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