

Automation threatening 25% of jobs in the US, especially the 'boring and repetitive' ones: Brookings study

 [cnbc.com/2019/01/25/these-workers-face-the-highest-risk-of-losing-their-jobs-to-automation.html](https://www.cnbc.com/2019/01/25/these-workers-face-the-highest-risk-of-losing-their-jobs-to-automation.html)

Annie Nova | John W. Schoen

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WEF: AI and robots will create 60 million more jobs 8:19 AM ET Mon, 17 Sept 2018 | 00:40

Demika Alston was a teenager when she was hired at Au Bon Pain as a cashier. Through the years, she climbed up to general manager.

There were other changes during that time too.

Catering orders moved online, kiosks that could answer customers' questions were installed and meal-taking iPads arrived. Many of Alston's co-workers were laid off. Then she was.

"I was one of those people who got caught back then," Alston, 46, said.

Certain people will feel the pain of automation more acutely than others, according to a new report by the Brookings Institution, titled, "Automation and Artificial Intelligence: How Machines Affect People and Places."

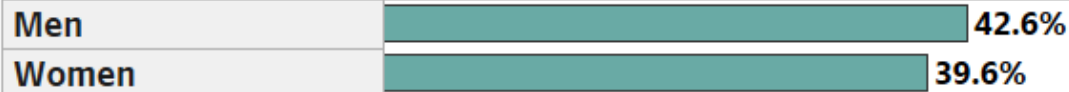
Many food preparation, office administration and transportation jobs will be taken over by machines. Highly creative or technical positions are most likely to prevail, along with personal care and domestic service jobs that require interpersonal skills and emotional intelligence, the researchers found.

Risk profile



Share of tasks that could be automated with current technologies. (SOURCE: Brookings Institution)

Gender



Age



Race/ethnicity



Low-wage earners will be among the first to see their jobs disappear, since many of their tasks are routine-based.

"If your job is boring and repetitive, you're probably at great risk of automation," said [Mark Muro](#), a senior fellow at the Brookings Institution and a co-author of the report.

Degrees appear to be a partial shield against robots: more than half of jobs that don't require a bachelor's degree are at risk of automation, compared with just a quarter of jobs that do.

"These technologies are likely going to benefit those who are well-trained," Muro said. But, he added, "Virtually all jobs are going to begin to experience some pressure from automation."

Chanda Wade, who has a bachelor's and master's degree, can attest to that uneasy reality. She noticed that [Cielo Talent](#), the recruitment company at which she worked, was moving to automate most of her tasks.

Algorithms scanned resumes for desired keywords, and chat boxes arranged interviews with candidates.

"I definitely felt a little threatened," Wade, 30, said. "That's my livelihood, and what I've been

doing for the last seven years." Both of her degrees are in human resources.

Still, sensing a narrowing future in the field, she signed up for coding classes online. Eventually, she enrolled in a program at LaunchCode, a non-profit that offers free coding lessons and career placement.

Today she's a developer at the publicly traded insurance company, Centene. "Surprisingly, the first company I interviewed with offered me a job," Wade said.

Overall, the researchers found one-quarter of jobs in the U.S. are at "high-risk" of automation, since 70 percent or more of their tasks could be done by machines. Another 36 percent of jobs are at "medium-risk" as a machine could do between 30 and 70 percent of their tasks. Some 40 percent of jobs are at "low-risk", with less than 30 percent of their tasks able to be performed by a robot.

These changes are likely to start unfolding soon, Muro said, particularly if we enter a recession. Automation is more quickly adopted during economic downturns when companies look to slash labor costs.

Where a person lives in the country also determines the degree to which their job is likely in danger, according to the report.

The Midwest is especially vulnerable to technological disruption, because jobs there revolve heavily around manufacturing and agriculture. In Kokomo, Indiana, 55 percent of the work could be automated; in Washington, D.C., just 39 percent.

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Automation could hit men harder than women, the researchers write, because they are more likely to work in transportation and construction. In comparison, around 70 percent of the roles in relatively safe occupations, such as health care, personal services and education, are staffed by women.

Age is another factor. Even though they grew up scrolling on screens, younger people are actually more at risk of automation than older workers. That's because they've over-represented in the food and retail industry, Muro said. If such typically entry-level positions thin out, he added, "it may well make it harder for some to get their first job."

Meanwhile, black and Hispanic workers will more acutely feel the employment consequences of automation, with 44 and 47 percent of their jobs at risk, respectively. Just around 40 percent of the jobs performed by white and Asian people are in danger.

After Alston was laid off from Au Bon Pain, she said she and her husband and three children had to move to a "rough" neighborhood in Washington, D.C. Things were tight.

Then she began to research her options, and ended up pursuing a certificate on Microsoft Word and Excel at Byte Back, which teaches tech skills to job-seeking adults.

She failed the test twice. She took it again and passed. Now she works as an administrative assistant.

"It was great to move toward the future and stay afloat," Alston said.

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