Technology | **Inventions**

Robots at Work

November 30, 2018

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BURGER BOT At Creator, in San Francisco, California, burgers are made by this machine.

AUBRIE PICK

When he was a kid, Alex Vardakostas helped out in his parents' restaurant. "As soon as standing on top of a milk crate made me tall enough to reach the counter, I was making sodas for customers," he told *TIME for Kids*. Before long, Vardakostas was working the grill alongside adult employees. He estimates he's flipped 50,000 burgers.

Now, Vardakostas co-owns a burger joint. It's a restaurant called Creator, in San Francisco, California. But he doesn't stand over a grill flipping burgers, and neither do his employees.



ROBOCOP A police robot patrols Beijing, China.

VCG/GETTY IMAGES

At Creator, burgers are cooked and assembled entirely by machine. A device engineered by Vardakostas grinds meat, cuts vegetables, grates cheese, and applies seasonings—all with machine precision. "This thing is the ultimate culinary instrument," Vardakostas says. The end result tastes just as good as—or better than—a burger made by hand. And because it costs less to maintain the machine than to pay a kitchen's worth of employees, burgers cost less.

Robo-Workers

Creator is just one example of a growing phenomenon: Automation is taking over more and more jobs. That means work is done by machines or computers instead of people.



FACTORY WORKER A robot welds a car part in an automobile plant.

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According to a 2017 report from McKinsey Global Institute, between 400 million and 800 million people could be forced out of their jobs by 2030. McKinsey predicts that as technology improves, some tasks will be done more quickly or cheaply by machine, so businesses will install robots or computer programs to perform them. That means there will be less work for human employees. Many people could lose their jobs or have trouble finding new ones.

"There's going to be a big disruption in the next 10 or 20 years," says Martin Ford. He is an author and futurist: He studies trends and makes predictions about the future.



ON THE ROAD A legally blind man prepares to test-drive a self-driving car.

KIM KULISH—CORBIS/GETTY IMAGES

A Human Touch

Some jobs are more likely to be automated than others. Machines can do jobs that have three characteristics: They are routine, repetitive, and predictable. "It's the kind of job where you come to work and work on the same kind of thing again and again," Ford says. "What you do each day is not too different from what you've done in the past."

According to the McKinsey report, some of these jobs pay low wages and require little education. But others pay well and demand an advanced college degree. Taxi drivers, cashiers, lawyers, and doctors all perform some tasks that can be done by machines.



MACHINE PRECISION Medical staff gather around a surgical robot as it carries out a demonstration.

FRANCOIS GUILLOT-AFP/GETTY IMAGES

So what jobs are safe from automation? "Anything where you're thinking outside the box and coming up with new ideas," Ford says. "Or work that involves interacting with other people, having empathy, and building relationships." Jobs in engineering, science, the arts, therapy, and nursing are examples.

At Creator, Vardakostas hired people to do just that kind of work. Instead of repetitive burger prepping, workers perform tasks that cannot be done by the machine. They interact with customers and advise them on flavor pairings, like mushroom sauce with pickles and onion jam. "In our world at Creator, all the work is creative and social," Vardakostas says. "And I think that is what we're going to see more of in the future."

Stop & Think! How does the writer help a reader visualize robots at work? How does
word choice affect a reader's response to the topic?
Assessment: Click <u>here</u> for a printable quiz. Teacher subscribers can find the answer key
in this week's Teacher's Guide.