



AI's double-edged sword of progress

Expert: Getting automated out may open more, better jobs



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INTERVIEW

There's this famous book, titled *'The Age of AI and Our Human Future,'* based on the beliefs and views of Henry Kissinger (former secretary of state and national security advisor of the United States), Eric Schmidt (former CEO of Google), and Daniel Huttenlocher (an American computer scientist and the inaugural dean of the MIT Schwarzman College of Computing) about artificial intelligence (AI). In the book, all three argue that artificial intelligence will soon make an impact on all human affairs.

The sentence is simple and short, but strange and somewhat frightening. Automatically, scenes of famous works of the world cinema and literature on the subject of robots are evoked in the mind; scenes of humanoid robots that are made by humans to serve him, but then spin out of human control and become the enemy of men; A powerful enemy devoid of true compassion. Artificial intelligence has crept into human life for several years and has gradually shown its extraordinary abilities to today's generation. Recreating the voices of singers who have long passed away or simulating the movements of our grandparents from their photos are just simple examples of the use of artificial intelligence that go viral every now and then.

Today, there is almost no field that has not been taken over by the technology of artificial intelligence. Artificial intelligence has actually filled the shoes of humans and is gradually replacing them in all activities. Artificial intelligence has upgraded the robots from their initial form, which ultimately played the role of simple workers in factories, to designers and managers of production lines. This has raised more alarms in various industries, making people seriously concerned about keeping their jobs.

With the penetration of artificial intelligence in different parts of human life, the concerns have gone even further; The concern is that robots and artificial intelligence will soon take over all the things that humans used to do and somehow replace humans. We are talking about very intelligent robots or machines with the ability to analyze and manage issues and make decisions like humans do or even much better.

"Superhumans" is a term that is used to refer to such intelligent robots; Robots that have the ability to invent and create by themselves, a trait that has been unique to humans among the creatures of this planet due to their intelligence and thinking power. Now, what will happen if someday these smart machines gain free will? Is it possible that one day intelligent robots will take control of the world and rule over humans? At this stage, no one knows. For now, this theory has proven more substantial for movies, but the question is how far will robots and artificial intelligence go and to what extent will they enter the social and emotional relationships of humans. Maybe the production of those works of art about the future of robots is also a result of this human concern.

In order to find an answer to these questions and concerns, Iran Daily conducted an interview with Hamid Zarrabi-Zadeh, the chair of the Computer Engineering Faculty of Sharif University of Technology. He has also been in charge of organizing the annual international Rayan AI Contest on artificial intelligence and programming.



Hamid Zarrabi-Zadeh

To be sure, unemployment is a major concern. What solutions can we come up with to mitigate its effects, given the situation?

Well, the thing is, such global changes are inevitable as we've seen it before in other cases. We're moving from one era to another. Remember when online taxi services like Uber in the US or Snap in Iran were launched? Everyone thought they would put round-the-clock call taxis out of business, but what actually happened was that many drivers from those agencies started working for Snap instead, and nothing bad occurred. Just the opposite, online taxi services ended up creating more job opportunities for the population at large. In fact, it was a step up for many people in the industry. What is more, transportation has become more accessible for everyone. With technology advancing, jobs are shifting. The creation of jobs at a higher level is generally a boon for society because they bring with themselves new facilities and quality of life improvements. However, it can be tough on some jobs in the short term. Some jobs might not be able to persist in their previous forms. So, after an interval, either those jobs will adapt and survive at a higher level or their practitioners will find other positions to work at.

Artificial intelligence might have some negative effects in the short term for some jobs, but society will catch up quickly. AI is just a technology, and like any technology, it's designed to make our lives easier. But let's not forget that this doesn't mean using a piece of technology more will necessarily make our lives better.

IRAN DAILY: Due to the rapid spread of artificial intelligence in various sectors and its replacement of human activities, some people are worried that the continuation of this process will lead to widespread unemployment of people from their jobs. How serious is this concern?

ZARRABI-ZADEH: The risks created by the development of artificial intelligence are really serious in some fields. Today, in some cases, artificial intelligence has the ability to practically eliminate jobs, for example, in the fields of medicine and especially general practice, now artificial intelligence provides sometimes more detailed recommendations on the treatment of patients, so that people gradually no longer need to go to a general practitioner. Or, in the case of driving, self-driving cars using artificial intelligence and computers will soon take over a major part of intercity driving in countries like the United States, and human drivers may no longer be needed in those roles. So, the problem is very much real, and soon, we will see it leave its mark in other jobs as well.



An Amazon worker services a robot that has automated a lower-level job.
AMAZON

How does AI differ from other technologies we've seen before?

Well, other technologies have had an impact on our lives as well, but the case of AI has been different. In previous years, when robots were placing many workers in factories, those workers were first out of jobs but then moved on to higher-level roles, and machines took over the lower-level tasks. The concern with AI is that it's gradually taking over higher-level jobs, where human intellect was once demanded. Of course, this would happen slowly, but if it does, humans would not be needed for many things that they took upon themselves to do, and this is where the threat is felt the stronger.



A technician checks a robot arm at an assembly line in Yaskawa Electric's factory in Kitakyushu, Japan, on March 18, 2016.
KATSUMI KASAHARA/
GETTY IMAGES