Ethics Activity

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Context

This work is based on the article Watch a robot playing table tennis after just 90 minutes of training, which explains how a research group of the University of Tübingen in Germany managed to ‘teach’ how to play table tennis to a robotic arm using machine learning algorithms. This kind of technique has been widely used in all kinds of domains before, including robotics, but the interesting fact in this work is that the whole training process only took 1.5 hours, demonstrating the great potential of the technology to solve complex problems. Even though the performance of the system is quite good under real scenarios, i.e. playing against an average human player, it has some limitations related to the physical properties of the robot and to edge cases inherent to the game.

Opinion

What is quite impressive, is the level of complexity of the solved task. Table tennis is an activity that demands very high precision and a strong technique, involving multiple physical phenomena. This article makes me think about how fast the fields of computer science and robotics are evolving together to get such achievement. To me, it is clear that this alliance of technologies will bring heavy disruptions in the dynamics of the labor market. The discussion about the rising dominance of robots, displacing inefficient error-prone humans, has been treated since many years ago. However, it is usually seen as a problem of a distant future. Machines can now perform highly elaborate tasks, such as sports, with relative easiness. And in recent years we have witnessed how AI algorithms have incontestably beaten the best players in brutally complex games like Go. In games or competitive sports, we tend to recognize and admire those who perform exceptionally, combining mental and physical skills with training and dedication, so my question is, what will happen when, in a near future, we get to have robots capable to outperform the best human athletes in every competitive domain?. And the issue of massive loss of jobs due to specialized robots?

References

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