

AI Automation and Labor Inequality: Autonomous Vehicles and the Future of Driving Jobs

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ABSTRACT

This study examines how artificial intelligence is changing the transportation industry and what that means for workers. Using self-driving vehicles as the main example, it argues that automation can help companies save money and work more efficiently. But automation can also threaten many driving jobs. This change may make the gap between big companies and working people even larger.

INTRODUCTION

Everyone has been talking about AI lately, and for good reason—it is already changing how a lot of industries work. Companies are using AI to automate things that people used to do, which helps them get more work done while paying less in wages. A lot of people see this as progress, something that will make the economy grow and work better. One place where this is really obvious is with self-driving cars. Companies like Tesla and Waymo have spent billions

trying to make autonomous vehicles that can drive themselves using AI, cameras, and complex algorithms. Tesla has been working on something called Full Self-Driving (FSD) for years now, and the whole point is to eventually have cars that do not need anyone behind the wheel.

People who are excited about this technology usually say it will make driving safer and traffic less terrible. And they may be right—computers do not get distracted or tired like humans do, so there might be fewer accidents. But there is also a downside that does not get talked about as much: what happens to all the people whose jobs involve driving? There are a lot of people who make their living driving. Taxi drivers, truck drivers, delivery drivers—these are real jobs that real people depend on. In the US alone, there are about 3.5 million truck drivers (American Trucking Associations, 2023). That is a huge number of people. If self-driving technology really takes off and companies decide they would rather have robots than humans, a lot of those jobs could just disappear.

One important thing about technology that people do not always think about is that it is not neutral. When new technology shows up, it usually helps some people and hurts others. Big tech companies stand to make a lot of money from automation because they will not have to pay drivers anymore. But the drivers themselves? They are the ones who lose out. There is this theory called standpoint theory that helps explain this. Basically, it says that where you are in society affects how you experience things (Harding, 1991). If you are a tech CEO, automation looks like innovation and progress. But if you are a truck driver who has been doing this job for twenty years, automation looks like a threat to your livelihood.

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METHODS

I am approaching this using qualitative analysis, which means I am looking at the bigger picture instead of getting into technical details. I am less interested in how self-driving cars actually work and more interested in what they mean for regular people. I picked autonomous vehicles as my case study because they are probably the most visible example of AI that is actually being rolled out in the real world. Tesla and Waymo are not just dreaming about the future—they are testing this technology on roads right now. By looking at what is happening with these technologies, I want to understand how automation is changing the job market for drivers and shifting the balance between companies and the people who work for them.

RESULTS AND INTERPRETATION

Taxi drivers are probably going to feel the effects of self-driving technology first. In most cities, driving a taxi is how a lot of immigrants and working-class people make ends meet (Bureau of Labor Statistics, 2023; Parrott & Reich, 2020). But companies have already started testing robotaxis in places like San Francisco and Phoenix—taxis with no driver at all (Waymo, 2024). From the company's perspective, this is a major advantage. Robotaxis can run 24/7, never ask for overtime pay, and do not need health insurance. That is a huge cost savings. But if you are a taxi driver, this is worrying. If robotaxis become normal, there just will not be as many driving jobs anymore. And it is not like most taxi drivers can just switch careers overnight.

Truck drivers are in a similar boat. Companies are developing autonomous trucks that can haul freight across the country with almost no human involvement. Currently, there are approximately 3.5 million truck drivers in the United States (American Trucking Associations, 2023). That is more than the population of about twenty different states. If self-driving trucks

become the norm, logistics companies will absolutely replace human drivers with automation. The reason is simple: it is cheaper. Therefore, this might make shipping stuff more efficient, but it also means millions of people could be out of work. And it is not like those jobs are coming back—once companies switch to automation, they are not going to switch back.

People like to say that technology is neutral, that it is just a tool. But I do not think that is completely true. Technology is developed by specific people with specific interests, and it usually ends up serving those interests. Companies that control AI technology are going to get really rich from automation. They get to produce more while paying less in wages (Frey & Osborne, 2017). Workers, on the other hand, do not really have a say in any of this. They cannot vote on whether their company adopts automation. They cannot stop it. Overall, AI is probably making inequality worse. Companies are getting more control over how things work, and workers are losing stability and the ability to negotiate for better conditions.

CONCLUSION

AI is already changing transportation in a major way. Self-driving cars might make roads safer and traffic better, but that is not the whole story. Millions of workers—including truck drivers, taxi drivers, and delivery drivers—could lose their jobs if autonomous vehicles become widespread (Bureau of Labor Statistics, 2023). And unlike some industries where new jobs appear to replace old ones, it is not clear what these workers are supposed to do instead.

This paper shows that AI is not just a neutral technology. It is making the gap between companies and workers bigger. Companies benefit because they save money and run more efficiently. But workers are out of a job and do not have many options. Going forward, we need

to think harder about this. Technology should not just benefit the people at the top. If we are going to have all this automation, we need to figure out how to make sure regular people do not get left behind.

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