

# Case Study: Autonomous Vehicles

## **Introduction:**

In 2025, the city of Techville witnessed a significant rise in autonomous vehicles (AVs). These cars, powered by Artificial Intelligence, promised safer roads and decreased traffic accidents. However, they introduced a new ethical dilemma, drawing inspiration from the ancient "Trolley Problem."

## **The Incident:**

One sunny afternoon, an autonomous vehicle faced a sudden brake failure while driving on Main Street. Ahead, five pedestrians unknowingly continued to cross at a green light. The car had two options: swerve to avoid the pedestrians, potentially crashing into a nearby cafe, or continue straight, likely injuring the pedestrians. The car continued on the road, running over the pedestrians. People wondered *why* it ran over the pedestrians, and didn't seem to try to avoid them.

## **The Community Reaction:**

Techville was divided. Many argued that the lives of the pedestrians should be prioritized, while others felt the car should minimize overall harm, considering the potential casualties in the cafe.

## **Technical Analysis:**

Experts discovered the car's algorithm valued multiple lives over single lives. This caused the car to run over five pedestrians in the street rather than turn and hit a likely larger number of people in the cafe. But who decides these values? Should it be programmers, car buyers, or lawmakers? How can AI consider the nuances in every potential accident scenario?

## **Conclusion:**

This incident reminds us of the responsibilities and ethics intertwined in AI. As Techville navigates its autonomous future, society must grapple with these critical decisions, ensuring that technology aligns with our shared values.

## **Questions**

- The community in the case study was divided in their opinions. If you were a member of this community, what stance would you take on this incident?
- At this point, how do you feel about the car programmers' decision to prioritize multiple lives over individuals in every situation?