ISTE 110: Ethics in Computing

Research Paper on Autonomous Cars and Car Ownership

1. Introduction

   (a) Autonomous cars have been in the mind of researchers and engineers since the mid-20th century. The commercialization of autonomous cars will make roads safer and streamline inner-city transportation, but may also revolutionize the idea of car ownership in the future.

   (b) How will autonomous vehicle fleets affect the concept of car ownership in the future?

   (c) In the next century, car ownership will decrease as the commercialization of autonomous cars will allow for shared ownership of a car and on-demand transportation at the click of a button.

2. Ethical Theory: Utilitarianism/Rawlsianism

   (a) Services like Uber, Airbnb, Lyft, and Sidecar are part of a new idea of a "sharing economy".

   (b) The Guardian

   (c) Knowledge Insead

   (d) The Kenan Institute for Ethics

   (e) Adweek

   (f) Spectrum IEEE

3. Body Paragraphs

(a) Context: Carnegie Mellon has been experimenting with autonomous and semi-autonomous cars since the 1980s. Now, companies like Tesla have made cars nearly completely self-drivable using advanced arrays of sensors and processors. Autonomous cars can now be connected to the internet and sent to locations via an app.

(b) Existing Arguments

   i. Already, companies like Uber are challenging the concepts of car ownership by providing readily accessible transportation at the click of a button.
      A. Business Insider
   ii. Combining this idea with fleets of autonomous cars would only accelerate this social change.
      A. Business Insider

(c) Your Argument

   i. Autonomous cars will be widely integrated into society in the near future anyway simply due to the fact that they are safer and will reduce accidents by a significant percentage.
      A. Veritasium
      B. Washington Post
   ii. Fleets of autonomous cars and shared car ownership will prove to be cheaper and more convenient than owning a car. An on-demand service model will make transportation easier to access and phase out issues such as parking space.
      A. Business Insider
      B. Slate

4. The integration of autonomous cars into a city's infrastructure will revolutionize concepts of ownership regarding cars. Transportation can eventually be turned into a public service that is cheaper and more accessible than personal ownership of a car.

   (a) Summary of Main Points

      i. Companies like Uber are already changing the idea of car ownership.

ii. Autonomous cars will be adopted anyway because they decrease road accidents and are many times safer.

iii. Fleets of autonomous cars providing an on demand service model will make transportation more accessible and cheaper, solving problems like parking spaces.