Topic 1:

Topic:

Exploring an Autonomous Driving Research Program: Tech Advancements, Legal Implications, and Ethics

Source:

Markus Maurer · J. Christian · Gerdes Barbara Lenz · Hermann Winner Editors Autonomous Driving: Technical, Legal and Social Aspects.

This book introduces the ethical issues related to autonomous driving in part1. In part2 and 5 it introduces the legal issues related to autonomous driving. Interspersed throughout the book are introductions to various technologies.

Ethical issue:

The ethical concern exists because although autonomous driving is a judgment made by the system, the program is written by people.

For example, before an unavoidable crash, is it better to crash into an elderly person or a child? When collecting data from the user, the user's geographic location, speed of the vehicle, length of the trip, etc. ... Should user data be saved, and where are the boundaries for collecting data?

Legal Issue:

Laws are necessary to define what constitutes autonomous driving and establish the standards of conduct for operators while driving autonomously. There is a requirement for legislation to delineate the allocation of responsibility when determining accidents caused by autonomous driving. Furthermore, there may be a need for a law to specify the types of roads where autonomous driving is permitted.

Technical Issue:

Specialized programming skills are required to ensure that the program runs correctly and that the correct actions are taken in time while driving. Advanced sensing technology is required to enable the automated driving system to accurately recognize complex road conditions. Data analysis and processing technologies are required to analyze and predict various accidents and road conditions in order to improve the safety and reliability of autonomous driving.

Topic 2:

Topic:

Legal, ethical and scientific issues related to In Vitro meat

Source:

Published: 15 October 2014 Moral Steaks? Ethical Discourses of In Vitro Meat in Academia and Australia Tasmin Dilworth & Andrew McGregor Editors

The comment called: IN VITRO MEAT: SPACE TRAVEL, * CANNIBALISM, AND FEDERAL REGULATION (This Comment won the 2012 Shook, Hardy, Bacon Award for Best Paper in the Area of Health Law)

Published online 2021 May 1 Current Issues and Technical Advances in Cultured Meat Production: A Review Tae Kyung Hong, Dong-Min Shin, Joonhyuk Choi, Jeong

Tae Do, and Sung Gu Han Editors

Ethical issue:

This ethical issue involves moral ambivalence about the authenticity of the environmental impact of in vitro meat technology, animal sacrifice, and potential social inequality and price.

Legal Issue:

The legal aspects of In Vitro meat cover new food safety standards, labeling, and intellectual property rights, and regulations need to be revisited and developed to ensure their legality and safety.

Technical Issue:

These scientific and technological issues relate to improving large-scale cell culture efficiency, selecting appropriate cell types, designing and automating culture systems, and improving scaffolds and bioreactors for sustainable in vitro meat production.