

The Study of Self-Driving Car Innovation, Development, and Implementation

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Abstract: *The invention of the self-driving car is one of the century's most significant inventions. The installation of an autonomous automobile has been a key subject among academics as technology advances. The history of self-driving vehicles, their research and development, the basic technologies that support self-driving, and the most critical components of bringing self-driving cars into practice are all covered in this article. The essay also goes through some of the challenges that completely autonomous cars face when it comes to widespread adoption, as well as possible solutions.*

Keywords: Advanced Driver Assistance System (ADAS), autonomous, navigation, positioning, self-driving technology, radar, lidar, path planning, obstacle avoidance, Full Self driving (FSD), accidents, protests, advantages, challenges.

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