

LITERATURE SURVEY

1. Deep Learning-based Vehicle Behaviour Prediction for Autonomous Driving Applications[Sajjad Mozaffari, Omar Y. Al-Jarrah, Mehrdad Dianati, Paul Jennings, and Alexandros Mouzakitis. 23 Jul 2020]

The behaviour prediction function of an autonomous vehicle is employed in this study to forecast the future states of the neighbouring cars using both historical and recent observations of the environment. Their awareness of the impending dangers is improved as a result. However, in straightforward driving situations that need for brief prediction horizons, standard behaviour prediction algorithms are applicable. Deep learning-based approaches have gained popularity most lately due to their promising performance in contexts that are more complicated than those addressed by conventional approaches. They were inspired by this rise in popularity to write this work, where they present a thorough analysis of the state-of-the-art deep learning-based methods for predicting vehicle behaviour.

2. A Survey of Deep Learning Applications to Autonomous Vehicle Control [Sajjad Mozaffari, Omar Y. Al-Jarrah, Mehrdad Dianati, Paul Jennings, and Alexandros Mouzakitis 23 Dec 2019]

Due to the very complex environment and inability to test the system in the vast range of scenarios it may meet after deployment, designing a controller for autonomous vehicles that can provide appropriate performance in all driving scenarios is tough. Deep learning techniques, however, hold considerable potential for generalising previously acquired rules to novel circumstances in addition to offering good performance for complicated and non-linear control issues. Deep learning is increasingly being used for vehicle control due of these factors. Although significant progress has been made in this area, these efforts have not yet been completely summarised. In order to control a vehicle using deep learning techniques, a variety of research works have been described in the literature. This study surveys those efforts.

3. Motor Vehicle Monitoring System[William F. Wan Ostrand and Jeffrey M. Sylvia, June 3, 1986]

This study describes a portable computer-based motor vehicle performance monitoring system that measures and computes vehicle characteristic data. For measuring various vehicle performance aspects, the system employs a distance sensor means, a fuel volume flow sensor means, and a fuel temperature sensor means. The start/stop feature of the system is computer controlled. It also contains a programming function that is user-prompted. Additionally, it contains a combined volume and mass metre for liquid fuel that employs a mathematical technique to transform volume data to mass data using a temperature-sensitive function.

4. The Concept to Measure the Overall Car Performance[Jarut Kunanoppadol1 Received: 25 January 2012 ; Accepted: 11 April 2012]

This study focuses on the overall car performance and examines why on-road testing is important for automotive engineering research and development. The final outcome of a car's acceleration depends on the engine's performance, the transmission system's design, the suspension's optimization, the car's size, shape, and aerodynamics, as well as the driver's competence and other elements. This study aims to demonstrate the idea of measuring a car's total performance based on its ability to accelerate. They discovered that this idea is feasible and practical due to the ability to transport digital input signals from an existing electronic control unit to an additional processor for analysis before the final product is displayed on any mobile display, including a laptop, tablet, or smart phone.