

	Dr D Y Patil Pratishthan's Dr. D.Y. Patil Institute of Engineering, Management and Research, Akurdi, Pune	
Academic Year: 2021-22	Seminar & Technical Communication Synopsis	
Term – I	Department : Computer Engineering	Date of Preparation : 06/08/2021

Roll No	TACO19108	Division	A
Domain Name	Artificial Intelligence		
Seminar Title	AI in Automobile Industry		
Student Name	Ojus P. Jaiswal		
Guide Name	Mrs. P. P. Shevatekar		

Abstract:

Vehicles have become one of the most well-known transportation modes. An ever-increasing number of vehicles happen with various Man-made intelligence-based frameworks. To make this standard transportation more agreeable, proficient, and more secure for individuals to use, man-made reasoning advancements are applied in vehicles, making them a lot smarter and more intelligent. Computer-based intelligence advances at present have effectively been used to a great extent in vehicles to further develop vehicle safety, efficient use, and solace. By enabling the AI advances in vehicles, vehicles are currently fit for doing considerably more than the vehicles previously. Presently the most recent advancements in AI strategies offer bunches of new freedoms for Intelligent Transportation Systems (ITS). The new utilization of those AI strategies in vehicles prompts the vehicle better assessing the surroundings and giving a convenient and relatively safe and comfortable driving experience to drivers. In any case, even though the present AI applications in vehicles are currently thorough, there are still plenty of enhancements that can be finished by individuals to make the vehicles become 100 percent safe and smart.

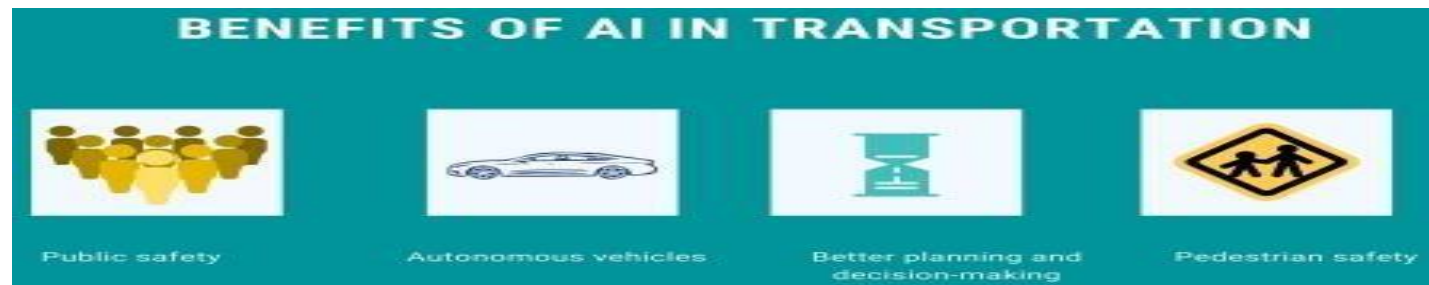
In this paper, three fundamental utilization of AI in vehicles including the AI for Vehicle-to-Everything(V2X), AI in the vehicle control system, and AI diagnostic device for vehicles will be shown. The current technical issues while applying AI in V2X and difficulties for all the Artificial intelligence applications are needed to be overcome. This paper additionally examines the future expectations for the improvement of the use of AI in vehicles.

Briefs about Contents:

In this growing era of technology, we are at the peak of innovation which not only helps us in saving time but also enables us to provide sustainable development. Embedding AI in the automobile industry has made life more efficient and productive and has also enabled us to get the most out of technology. AI in automobiles will be a revolutionary step for our future generation. AI has enabled us to save more time and also provide us with a futuristic approach towards enabling user-friendly solutions. The utilization of AI in vehicles is changing the

	Dr D Y Patil Pratishthan's Dr. D.Y. Patil Institute of Engineering, Management and Research, Akurdi, Pune	
Academic Year: 2021-22	Seminar & Technical Communication Synopsis	
Term – I	Department : Computer Engineering	Date of Preparation : 06/08/2021

individuals' ability to understand traffic safety, driving style and saving a huge amount of time. It has the most significant use as everyone can travel to any destination in no time as AI provides us with the best route in terms of traffic and time.



Applications areas:

- **AI in V2X Application:** Artificial intelligence joined with Vehicle-to-Everything(V2X), a framework that permits vehicles to speak with moving pieces of the traffic system around them, can empower unconventional applications in Vehicular Ad-hoc NETworks (VANETs).
- **The Application of AI in Vehicle Control System:** Applying AI procedure in vehicles is additionally able to control the speed of a vehicle in regards to the driver's driving propensity. Driving security has been guaranteed by the use of AI in the vehicle control framework.
- **AI Diagnostic Device for Vehicles:** An Artificial Intelligence diagnosis device is given, which is utilized to deal with the electrical equipment and control hardware of a vehicle utilizing a separate diagnostic central processing unit to analyze breakdown continuously and report the diagnosis results to the driver. Since the failure of the car is automatically checked each day, accidents caused by poor maintenance can be prevented.

Conclusion:

From the above, we can conclude that AI in the automotive industry is an evolutionary step for getting things done more effectively and efficiently. It is user-friendly as well as environmental-friendly and ultimately, will lead to sustainable development. It is a great way to save the exploitation of nature and human resources available in our surroundings.

Signature of Student

Signature of Guide