

World speed record for a self-driving car

April 29 2022



Politecnico di Milano-PoliMOVE broke the world speed record for a fully autonomous car on a straight. Credit: Politecnico Milano

192.2 mph/309.3 kph... never before has a car driven by artificial intelligence alone been this fast.

On 27 April on the straight of the Space Shuttle airstrip at NASA's Kennedy Space Center in Cape Canaveral, the car created by the Politecnico di Milano-PoliMOVE broke the world speed record for a



fully <u>autonomous car</u> on a straight (the previous record held by Roborace was 175.49 mph/282.42 kph). The Politecnico Team had already achieved the record on 26 April but decided to raise the bar and improve its performance. On 27 April, PoliMOVE's car beat its own record to reach an incredible speed of 192.2 mph/309.3 kph, smashing through the "wall" of 186.4 mph/300 kph.

The speed of 192.2 mph/309.3 kph was obtained as an average of over 1 km in two consecutive attempts in opposite directions (to eliminate the effects of the wind). The Politecnico was the only team to attempt this, thanks to their victory in Las Vegas in the Indy Autonomous Challenge. In a few days, the team will attempt to replicate the feat on the Atlanta circuit, this time on a race track and not on a straight.

"We saw what the future holds for <u>autonomous vehicles</u> and credit goes to the entire PoliMOVE team, especially Dr. Brandon Dixon of the University of Alabama," said Prof. Sergio Savaresi, team lead of Politecnico di Milano.

"We were running a car operating on algorithms alone, where precision is paramount, and any small prediction error could have created a completely different outcome. This test run was exhilarating, and we are thrilled with the world record, but we're also excited by the fact that this data will be made available to all, and the industry will benefit from our work and learnings."

PoliMOVE is part of the Politecnico research group mOve, led by Professor Sergio Savaresi, which has been studying for 20 years automatic controls in all types of land vehicles: from electric bicycles to cars and even tractors. On 7 January 2022, the PoliMOVE team from the Politecnico di Milano won the Indy Autonomous Challenge in Las Vegas, the first head-to-head race between cars driven by <u>artificial</u> <u>intelligence</u>, where PoliMOVE reached the track speed record of 172.9



mph/278.4 kph. The competitors included teams from some of the best universities in the world. All the teams raced with the same vehicle, the Dallara AV-21; the added value was the work of the individual teams.

Provided by Politecnico Milano

Citation: World speed record for a self-driving car (2022, April 29) retrieved 26 April 2024 from <u>https://techxplore.com/news/2022-04-world-self-driving-car.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.