Augmented Reality Navigation System.

According to the third task we have four corner radars (two in the front and two in the back) and one front camera. These sensors create description and visualization of environment, predicting possible outcomes during the ride. The system allows drivers to see the real scene around it, to better understand where and how to drive. As we already mentioned, the car is equipped with four corner radars. Therefore, it is capable to follow the line in which it is moving. Sensors are connected with an onboard computer and they are constantly sending and receiving information. A computer processes data from cameras and radars, calculate velocity, angle and position. After, a driver is provided with all information through audio visual aids like car speakers and HUD. HUD is displayed on the inside of a windscreen. The system shows the route to the destination like following line that gives directions, information about all details that are needed during drive and gives analysis to every upcoming obstacle. It is possible to have a feature to turn on virtual vehicle that will be on a virtual distance in front of the car in order to follow directions.

Drive is ‘conditional automation’ (“Environmental detection capabilities. The vehicle can perform most driving tasks, but human override is still required”), therefore the ride becomes more comfortable and safer.

The system is integrated with global maps (i.e. Google Maps). Therefore, the route becomes more detailed and determined.

Our main idea is to fully use sensor capabilities and to develop an idea that will be totally new for the market. Our 3D navigation system “Landspeeder++” will bring new capabilities to the businesses in the future.

Business implementation

According to the global market, 'autonomous cars' are expected to grow at a CAGR (Compound Annual Growth Rate) of 31.3% during the forecast period, from $1.64 billion in 2021 to $11.03 billion in 2028.

This particular idea can be implemented as profitable business idea for several reasons. To begin with, this industry is experiencing rapid growth. It offers simplicity and comfort, with safety as the top priority for everyone on the planet. Furthermore, autonomous vehicles are in high demand today and will be the technology of the future.

The first fully automated vehicles are expected to appear in the near future. By 2025, these vehicles will be displayed in "showrooms." The first generation of AVs has already arrived. There are numerous opportunities for businesses, particularly those with prior expertise and experience in unmanned systems and/or technologies for automated, connected, and electric vehicles.