

# Robocars make ready for urban challenge

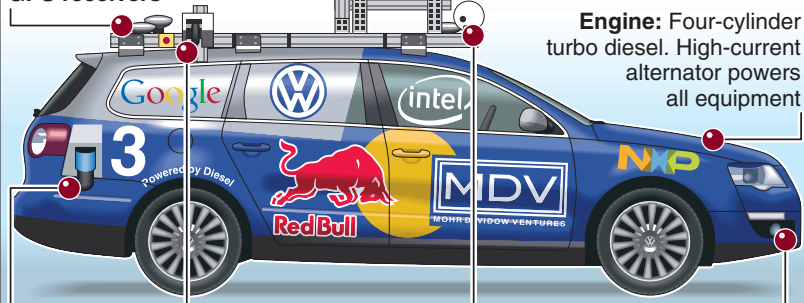
**Stanford University** is one of 36 teams aiming to qualify for the **DARPA Urban Challenge**, a simulated military supply mission conducted by driverless vehicles through an artificial cityscape. The robot cars must complete a 100km course in six hours, obeying traffic laws and avoiding other vehicles and obstacles

**JUNIOR:** Modified 2006 VW Passat Wagon

## Roof-mounted laser

Range-finding system spins 15 times per second to give 360° view of surroundings

## GPS receivers



## Rear-view lasers

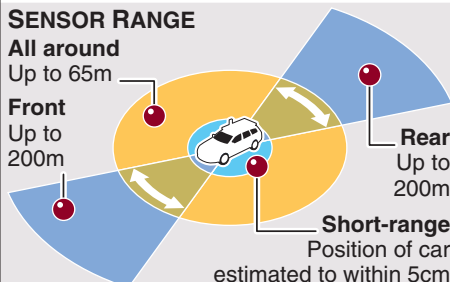
Cover area behind car

## SENSOR RANGE

**All around**  
Up to 65m

## Front

Up to 200m



**Low-speed lasers:** Two side- and one forward-facing look for nearby objects and determine road markings from brightness differences on ground

## Front scanners

In place of fog lights, detect distant objects ahead of car

