

# Autonomous Cars driven by Machine Learning

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# AUTOMATION LEVELS OF AUTONOMOUS CARS

## LEVEL 0



There are no autonomous features.

## LEVEL 1



These cars can handle one task at a time, like automatic braking.

## LEVEL 2



These cars would have at least two automated functions.

## LEVEL 3



These cars handle "dynamic driving tasks" but might still need intervention.

## LEVEL 4

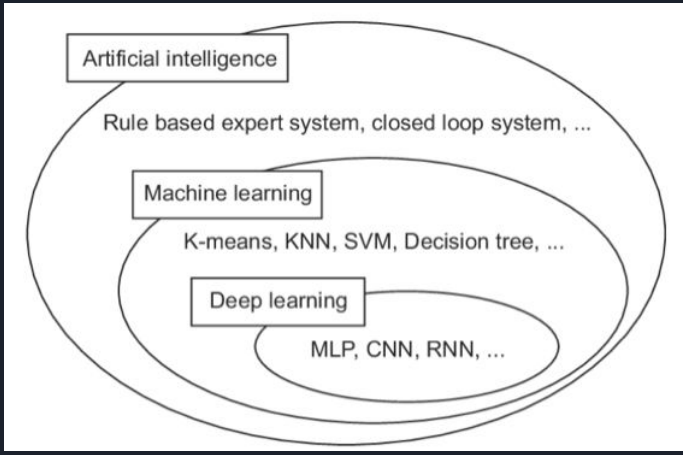
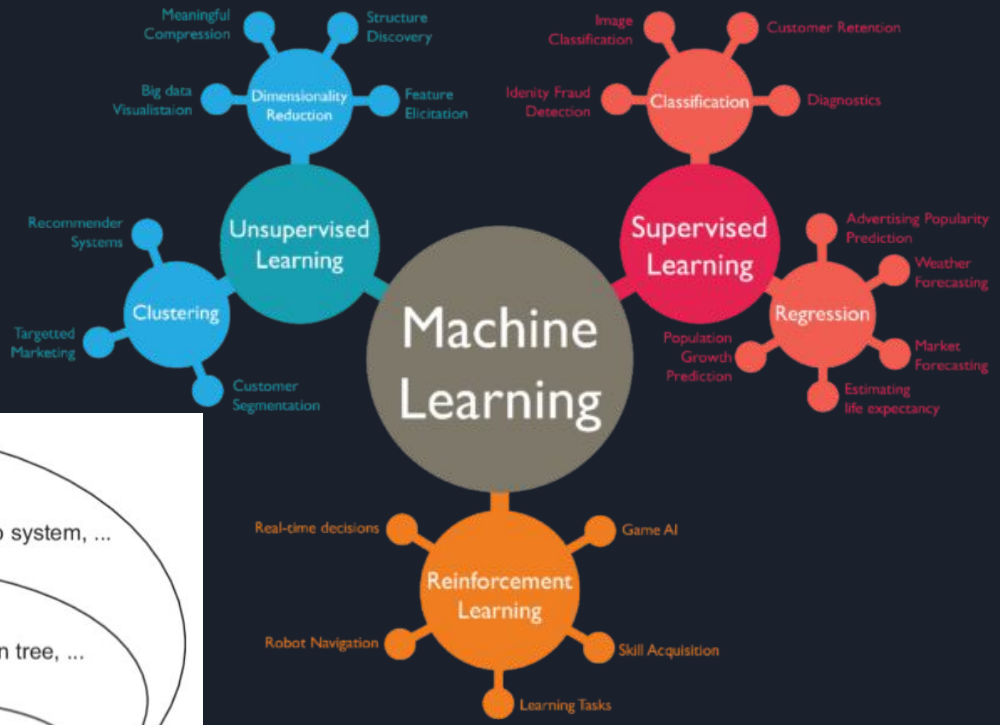


These cars are officially driverless in certain environments.

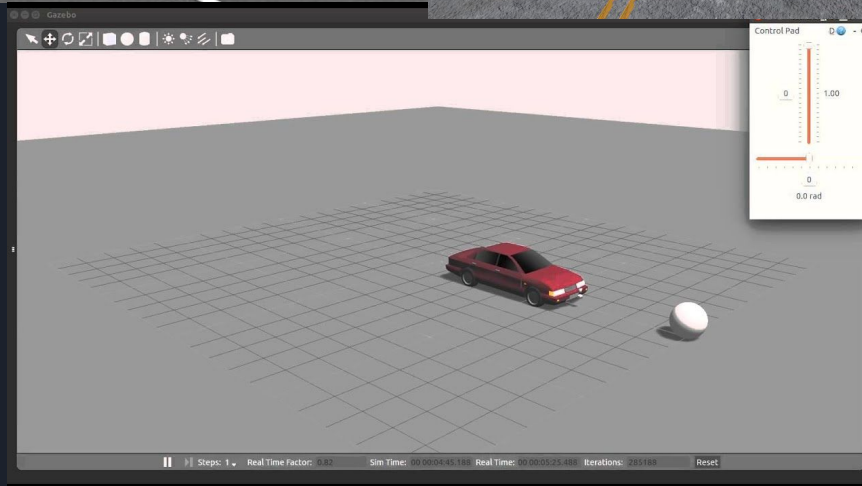
## LEVEL 5

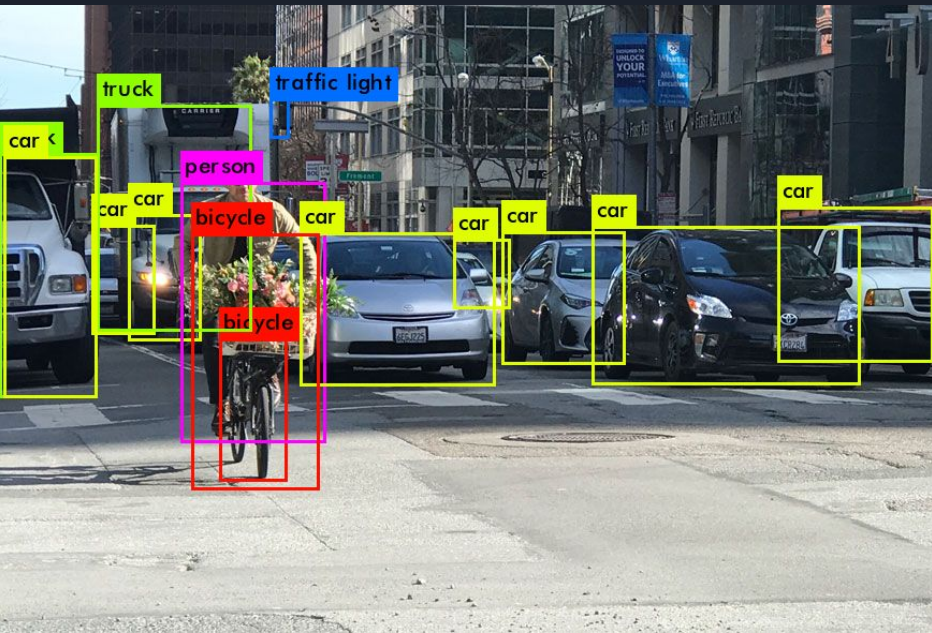


These cars can operate entirely on their own without any driver presence.

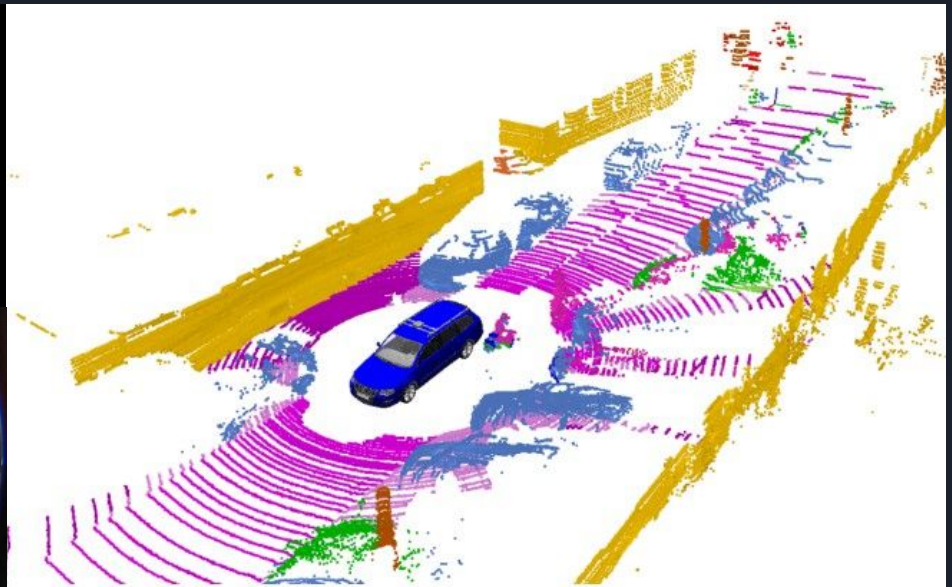
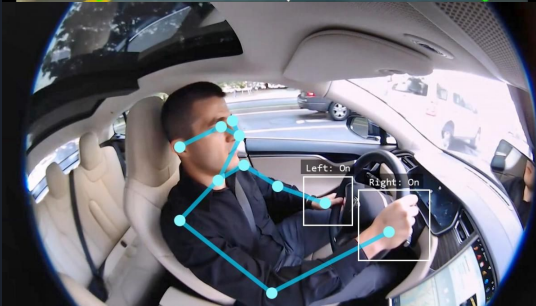


# Simulation vs Real World







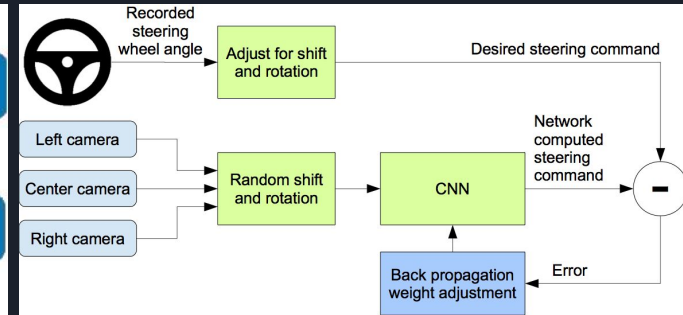
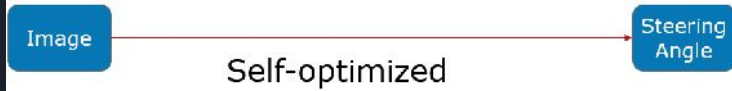


# End-to-end learning

## Traditional approach



## End to end learning





## Learn more

- <https://selfdrivingcars.mit.edu/> (free)
- <https://www.udacity.com/course/self-driving-car-engineer-nanodegree--nd013> (1 month free)
- <https://www.coursera.org/specializations/self-driving-cars> (free until 1st August)
- <https://www.nvidia.com/en-us/deep-learning-ai/education/> (free if you ask me)