



Reinforcement Learning in the Transportation Sector : Autonomous Vehicle

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01

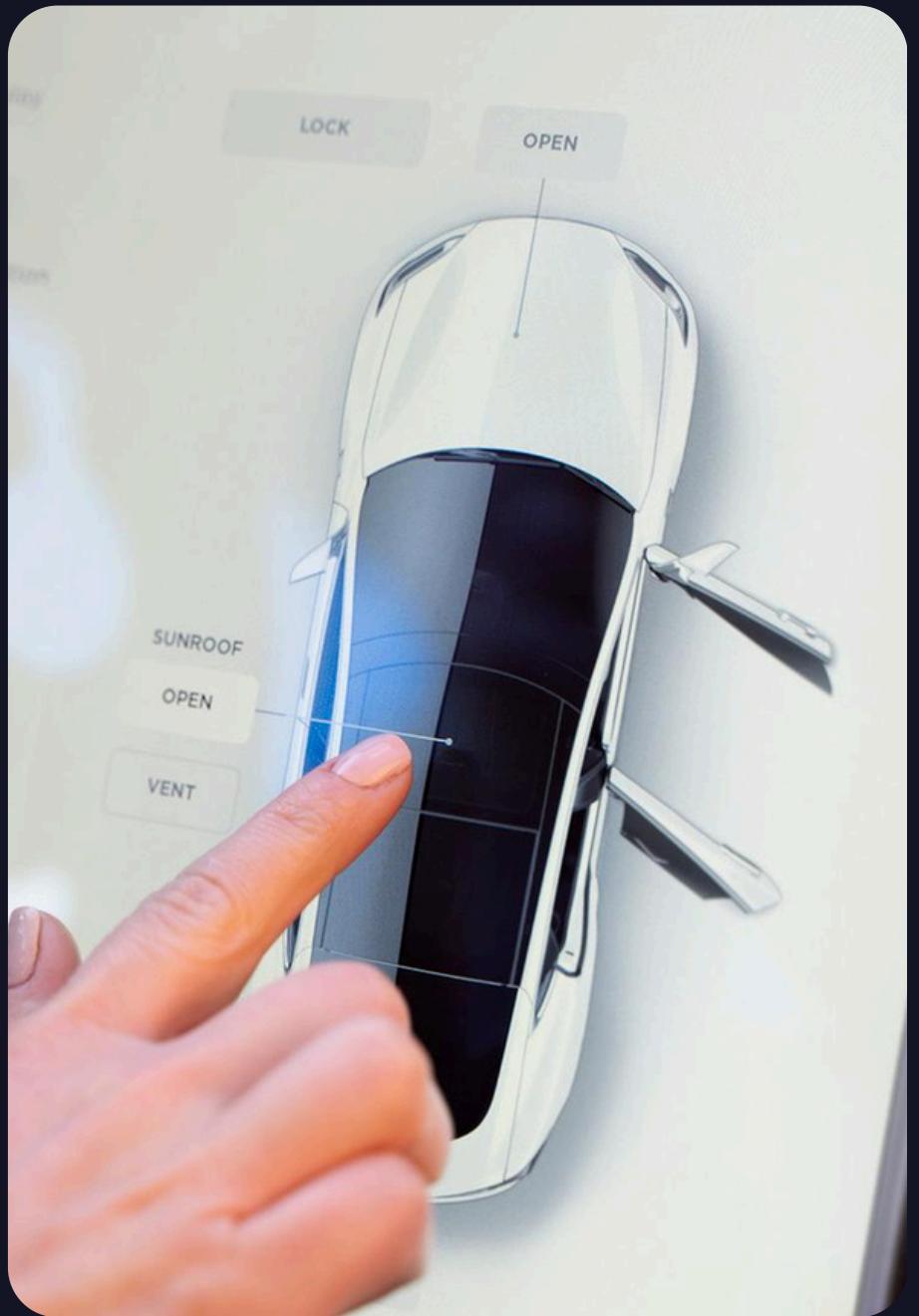
Introduction



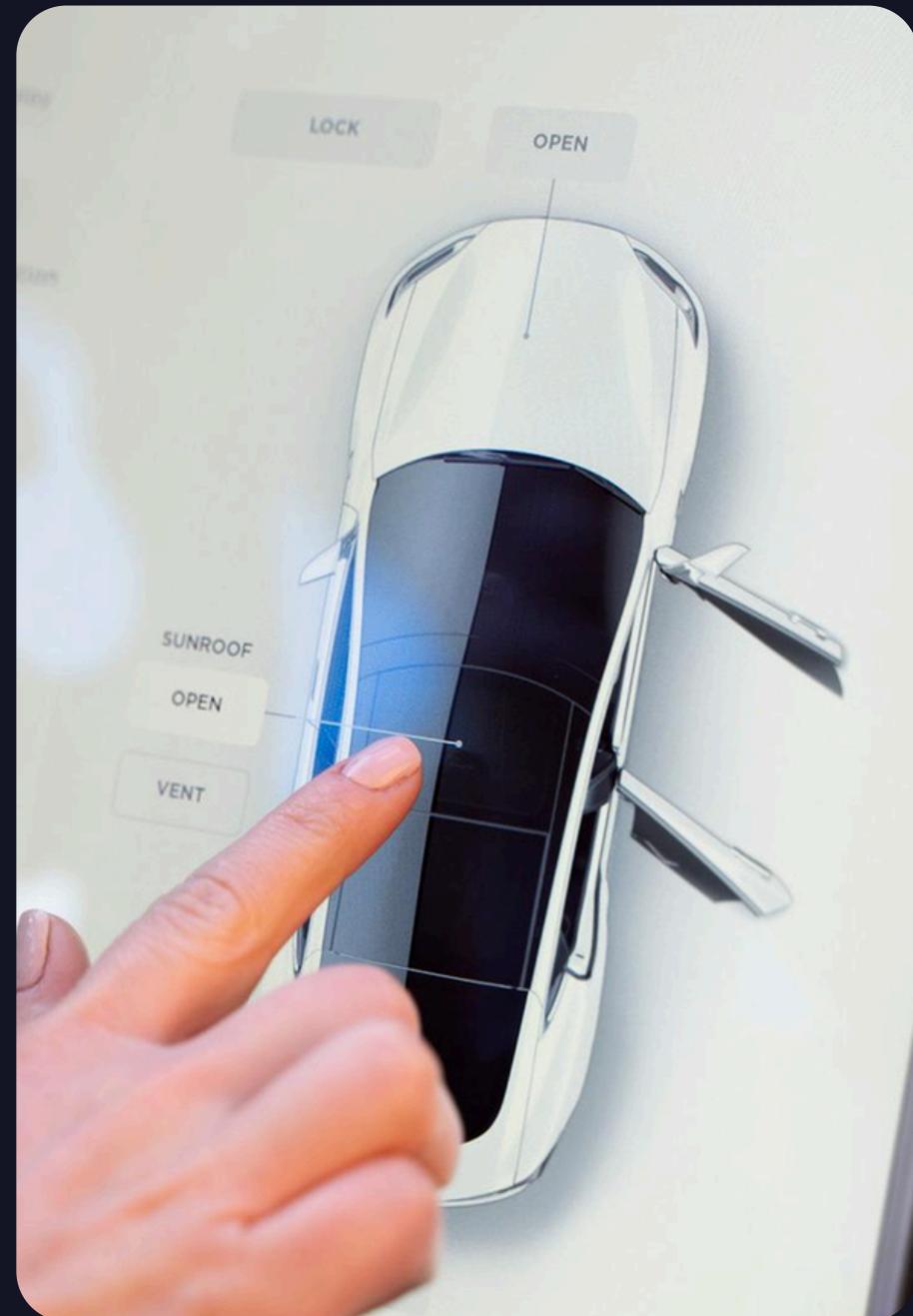
Background

Some History

- Experiments have been started on automating cars since 1920.
- First experimental vehicle took place in 1950.
- The first self-sufficient and truly autonomous car appeared in 1980.



Background



LET'S TALK ABOUT FUTURE

- Waymo -- Zoox -- Nvidia
- They are really good in what they are doing
- maintain trust in the safety of autonomous vehicles,

Problem & Solutions

Model In the Cloud



5G connection

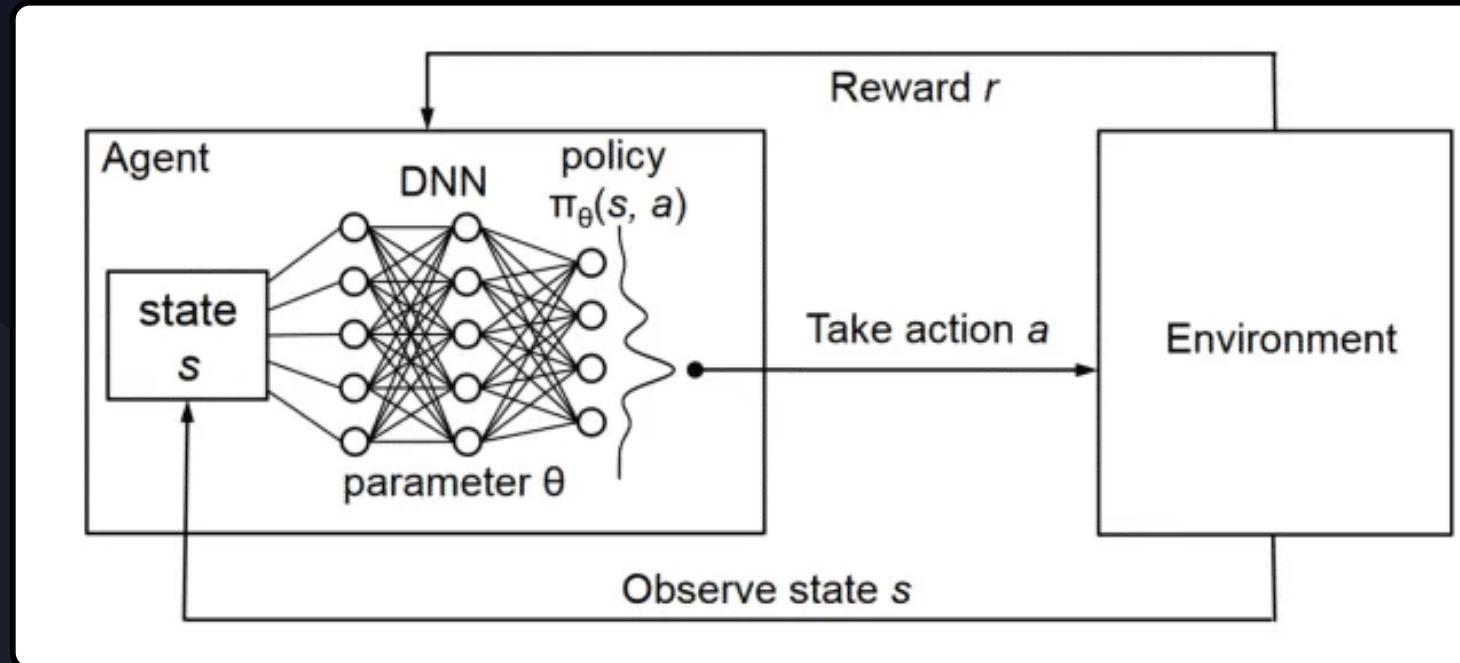


DDQN

Production Model Size

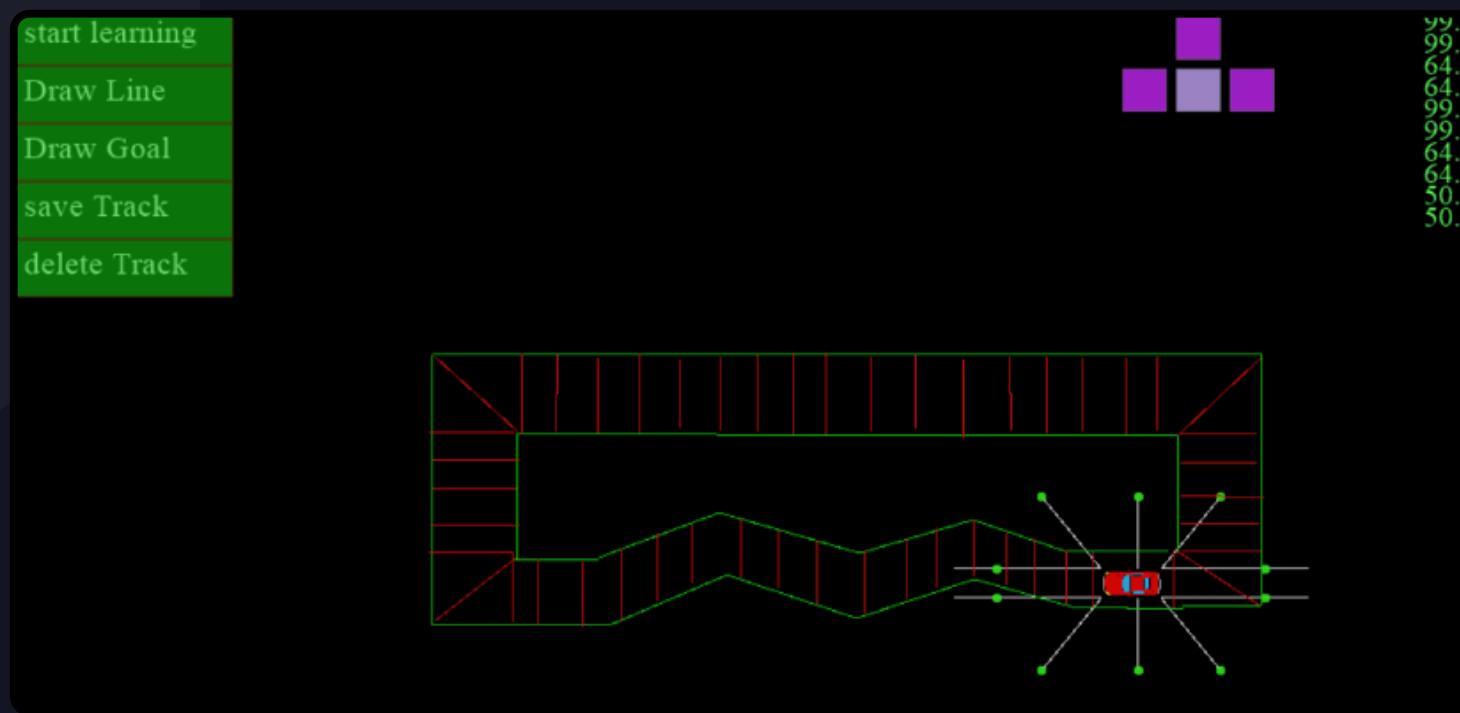


DDQN In Depth



Deep Reinforcement Learning & DDQN

Deep Reinforcement Learning (DRL) combines deep learning and reinforcement learning to train neural networks for optimal decision-making

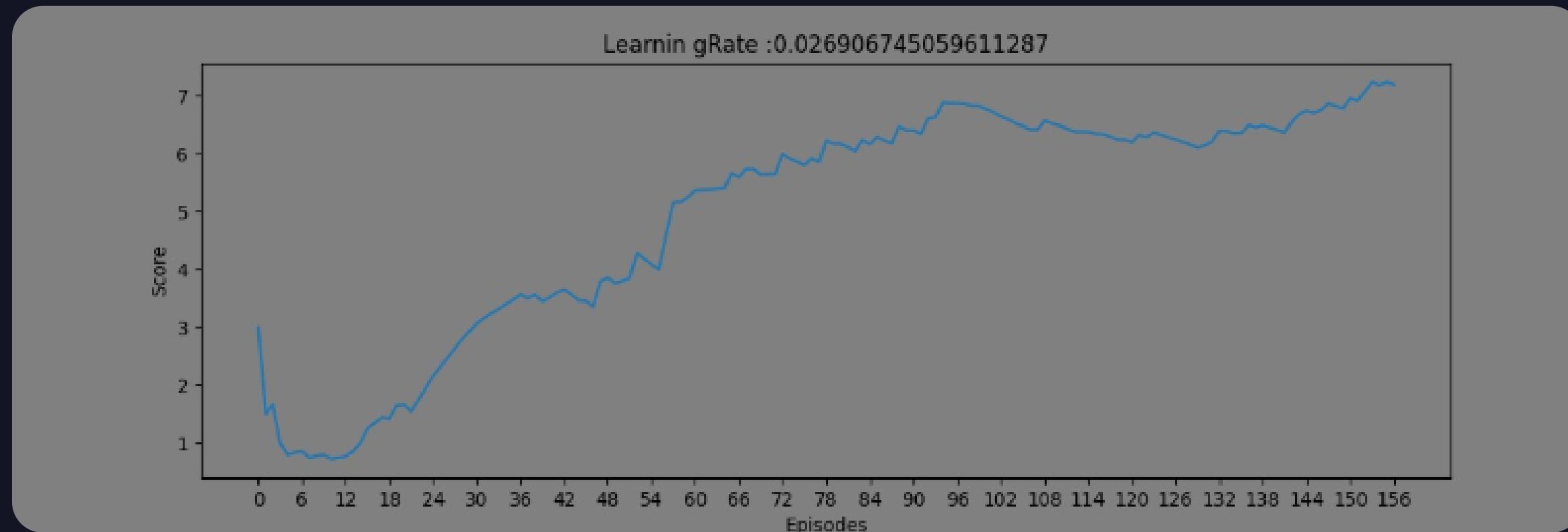


Environments

Creating robust simulation environments for autonomous vehicle AI using Pyglet framework.



Results & Discussions



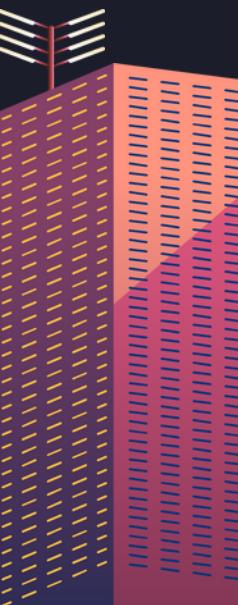
Scalability



Efficiency



Precision



THANK YOU FOR YOUR ATTENTION

