**Trajectory of a vehicle**

1.https://www.sciencedirect.com/science/article/pii/S1877042812028984

2. LaValle, S. M. (2006). Planning algorithms. Cambridge university press.

3. https://www.tandfonline.com/doi/full/10.1080/13658816.2019.1620236

ADAS

1. <https://www.researchgate.net/publication/360065831_Advanced_Driver_Assistance_System#:~:text=Advanced%20Driver%2DAssistance%20Systems%20are,equipment%20to%20ensure%20road%20safety>.
2. https://en.wikipedia.org/wiki/Advanced\_driver-assistance\_system

Advanced Driver-Assistance Systems are electronic systems that help the driver while driving the vehicle by providing precise reading of the data collected from road environment using various equipment to ensure road safety. When designed with a safe human-machine interface,  
they are intended to increase driver safety and overall road safety. Most accidents occur due to  
human error which can be easily avoided by the use of artificial intelligence along with  
electronic technology. The ADAS are intended to avoid road accidents which usually occur  
due to human error by using electronic technology. The use of this kind of system in vehicles is great for applications like blind spot monitoring, lane-keep assistance and forward collision warning. The use of ADAS is a most to ensure road safety and proper traffic management.[1]

Advanced driver-assistance systems (ADAS) are technologies that assist drivers with the safe operation of a vehicle. Through a human-machine interface, ADAS increase car and road safety. ADAS use automated technology, such as sensors and cameras, to detect nearby obstacles or driver errors, and respond accordingly. ADAS can enable various levels of autonomous driving.[2]

Mixed traffic environment:

1. trafficPredict
2. <https://www.sciencedirect.com/science/article/abs/pii/S0968090X23002474>
3. https://www.sciencedirect.com/science/article/pii/S2046043022000260

Mixed traffic environments refer to roadways where various types of vehicles share the same space, including traditional human-driven vehicles, bicycles, motorcycles, pedestrians, and increasingly, autonomous vehicles. These environments present unique challenges and dynamics due to the differing speeds, sizes, behaviors, and vulnerabilities of the different road. To safely and efficiently navigate in complex urban traffic, autonomous vehicles must make responsible predictions in relation to surrounding traffic-agents (vehicles, bicycles, pedestrians, etc.). A challenging and critical task is to explore the movement patterns of different traffic-agents and predict their future trajectories accurately to help the autonomous vehicle make reasonable navigation decision.[1] Efficient traffic control can alleviate traffic congestion, reduce fuel consumption, and improve traffic safety. With the development of communication and automation technologies, regular. vehicles (RVs), connected vehicles (CVs), and connected and automated vehicles (CAVs) will coexist on urban roads in the near future. [2] Heterogeneity is one of those characteristics which differentiate traffic conditions of a developing country from other developed nations. The heterogeneity which represents the diversity among vehicle categories is suspected to have adverse influences on lane discipline, congestion potential, and road users’ safety.[3]

Literature Review

Driver Behavior Paper: <https://arxiv.org/abs/1803.00881>

Motion of road agent paper: <https://arxiv.org/abs/1906.08469>

Map Driver Intention.pdf: <https://www.researchgate.net/publication/233864303_Exploiting_Map_Information_for_Driver_Intention_Estimation_at_Road_Intersections>

Mixed Autonomy: https://arxiv.org/abs/2402.04318