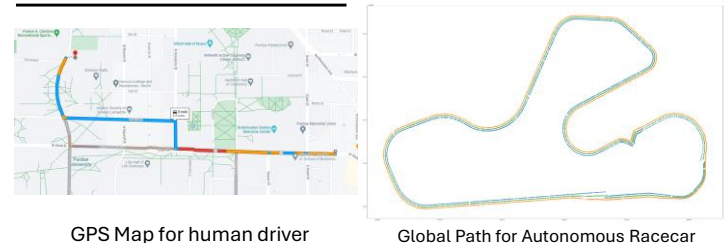


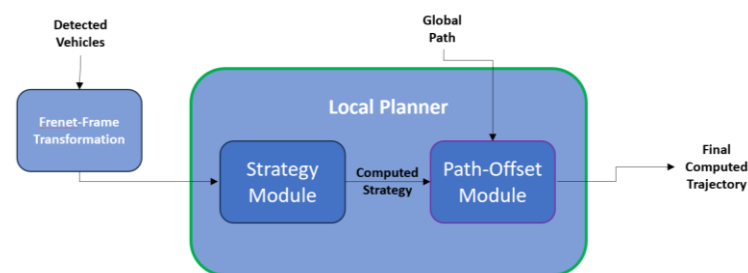
What is a Planner?



GPS Map for human driver

Global Path for Autonomous Racecar

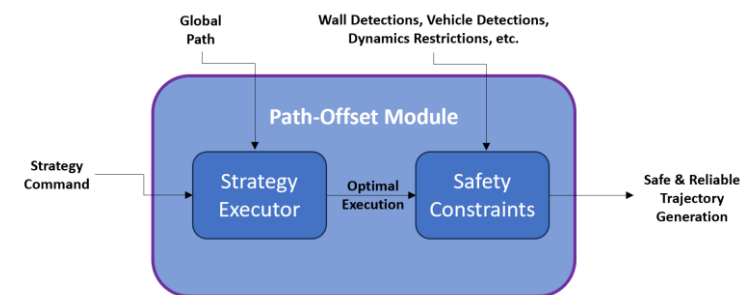
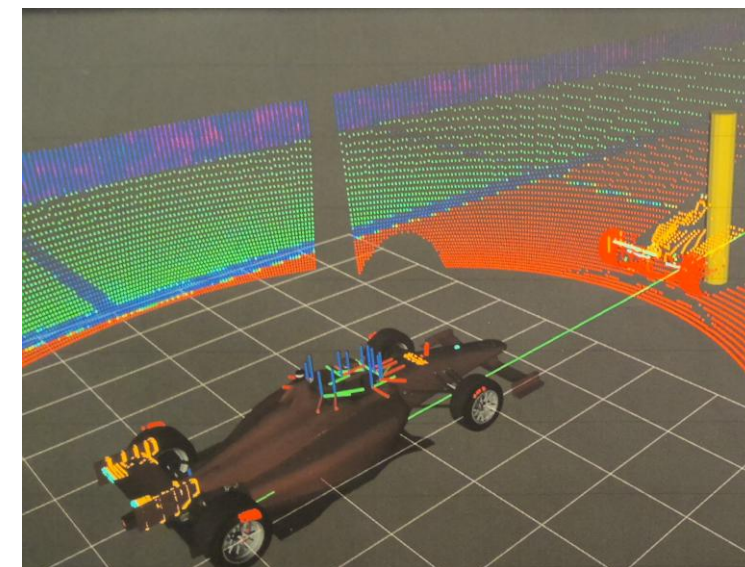
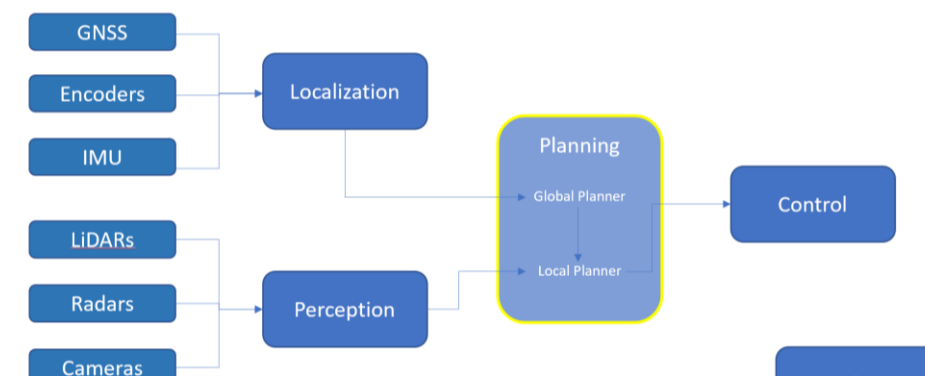
- Just like human drivers, who use maps and GPS for navigation, Autonomous cars use Global Paths for navigation
- The global path is generated by the global planner, which is static and calculated offline.
- This global path is then modified by the local planner to account for anything that cannot be predicted before the vehicle is at that location. (Cars, pedestrians, stoplights, etc.)



Two-node state machine

Local Planner consists of Strategy Module and Path Offset Module.

- Strategy module computes strategy (Attack, Defend, Overtake, Catch up)
- Path Offset Module Executes strategy



Redundant system design

The Path Offset module has two sets of algorithms:

- First set of algorithms executes the strategy from the strategy module
- Second set of algorithms layered on top of first and makes sure the car will not collide with anything