

Randomized Kinodynamic Planning

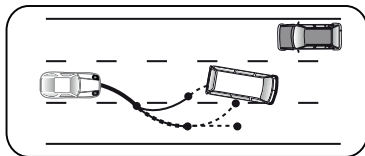
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Solve the motion planning problem of automated vehicles by considering the following constraints:

- Kinodynamic constraints (dynamic bounds of the vehicle)
- Obstacle constraints (collision-free trajectory)



Proposed method: Rapidly-Exploring Random Trees (RRT)

- Familiarizing with the literature on RRT.
- Choosing an approach which is well suited for automated vehicles.
- Implementing this RRT algorithm in Python.
- Extending the approach by considering traffic rules.
- Evaluating the algorithm in hand-crafted scenarios.