Literature Review

Local Planner Comparison

Foundational Papers

DWA Fox, Burgard, Thrun (1997)
The Dynamic Window Approach to Collision Avoidance
https://www.ri.cmu.edu/pub_files/pub1/fox_dieter_1997_1/fox_dieter_1997_1.pdf

APF Khatib (1986)
Real-Time Obstacle Avoidance for Manipulators and Mobile Robots
Search on Google Scholar

VFH Borenstein & Koren (1991)
The Vector Field Histogram - Fast Obstacle Avoidance for Mobile Robots
Search on Google Scholar

Pure Pursuit Coulter (1992)
Implementation of the Pure Pursuit Path Tracking Algorithm
https://www.ri.cmu.edu/pub_files/pub3/coulter_r_craig_1992_1/coulter_r_craig_1992_1.pdf

Methodology Papers

Comparison Example (2021)
Simulation Performance Evaluation of Pure Pursuit, Stanley, LQR, MPC Controller
https://ieeexplore.ieee.org/document/9517448/

Survey (2023)
Motion Planning for Autonomous Driving: The State of the Art
https://arxiv.org/abs/2303.09824

Additional Reading

- VFH+ - Ulrich & Borenstein (1998)

- Any "Improved DWA" paper (2023-2024)

- Any real robot comparison paper

- Any Ackermann vehicle paper

- Path Planning Trends Review (2025)