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# PROJECT REPORT

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Line-following for Ackerman car

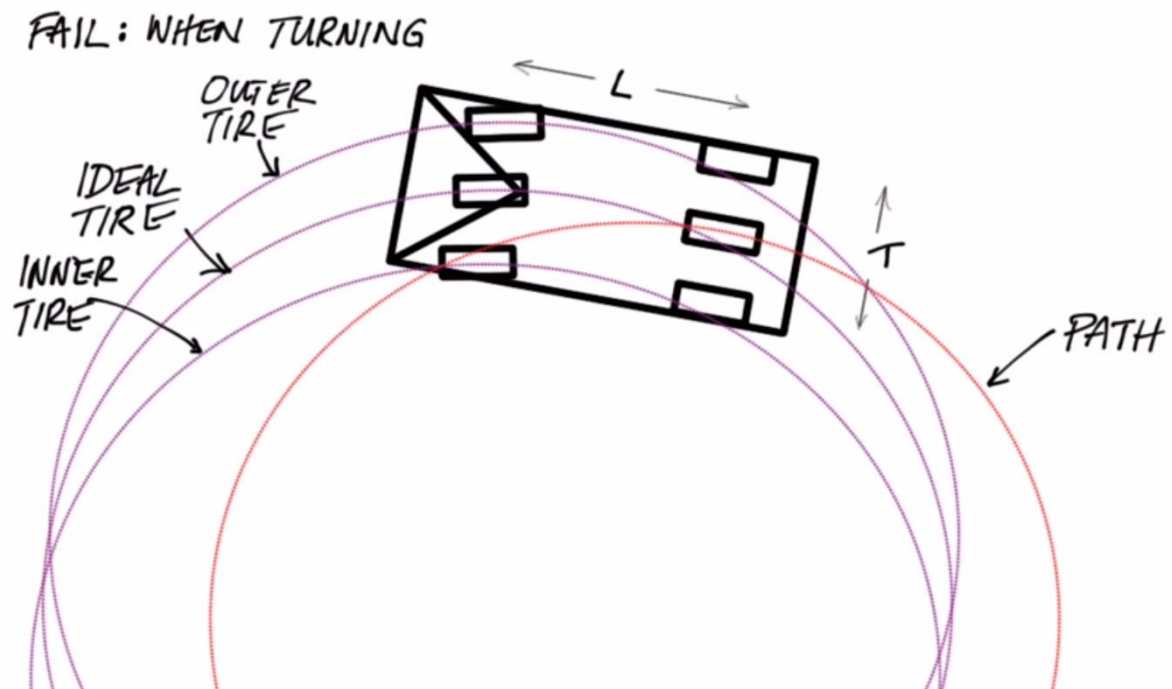
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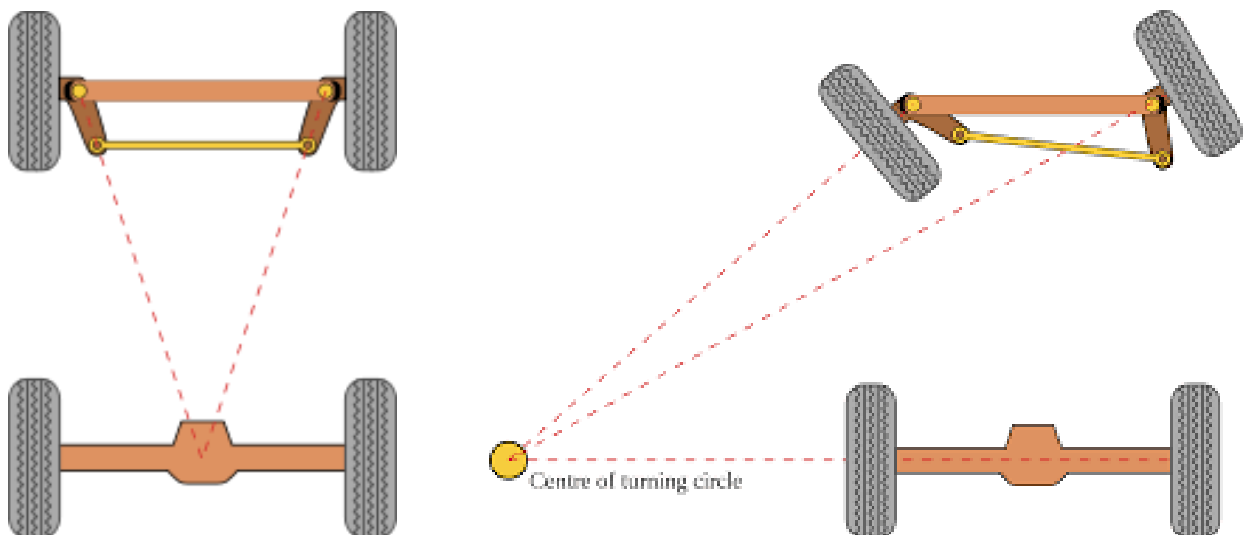
## Introduction

Ackermann steering geometry is a geometric arrangement of linkages in the steering of a car or other vehicle designed to solve the problem of wheels on the inside and outside of a turn needing to trace out circles of different radii.

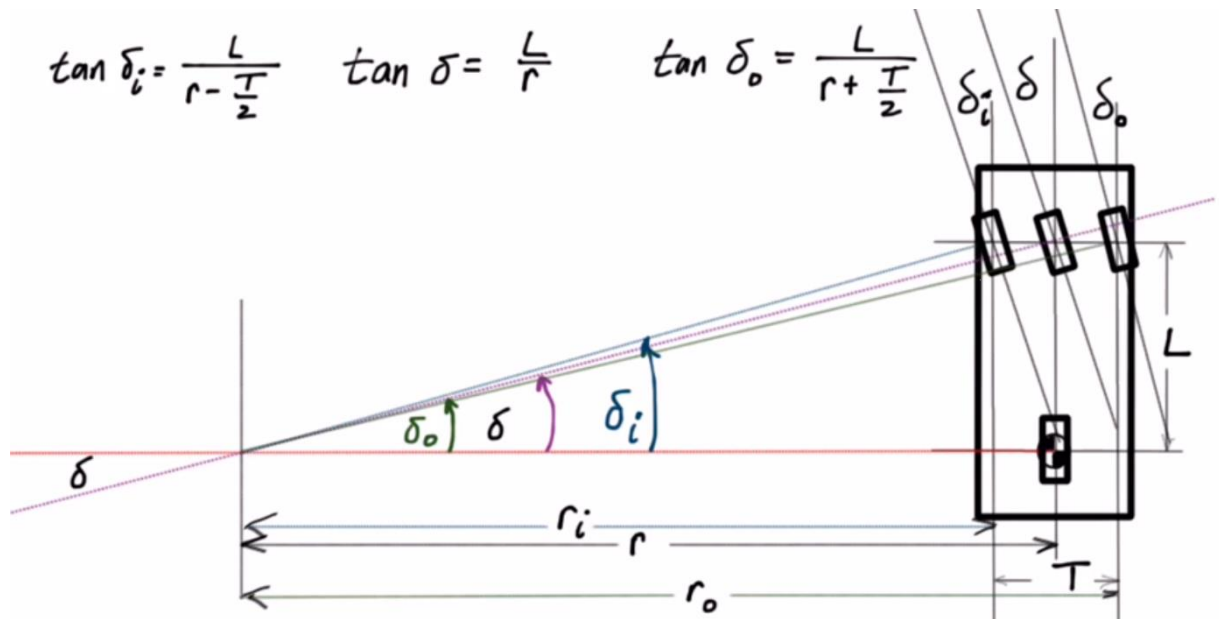
It allows preventing situation in which left and right wheels of a car move different trajectories (as on the picture below).



Ackerman steering was invented for solving this problem.



## Geometry of Ackerman car



## Solution

Code for line-following Ackerman car model is written as Lua script and can be found in

*\V-REP simulation\ackerman car\ackerman\_car.ttt -> Scripts ->*

*Threaded child script(modAckermannSteeringCar)*

## References

[https://en.wikipedia.org/wiki/Ackermann\\_steering\\_geometry](https://en.wikipedia.org/wiki/Ackermann_steering_geometry)

<https://www.youtube.com/watch?v=i6uBwudwA5o>