

Vehicle navigation on roads is a complex problem that will probably be solved by using artificial intelligence in key roles. Today, there are cars capable of autonomous driving, but they are dependent on an old infrastructure that primarily includes intersections designed for human drivers. This thesis opens a new chapter in the area of autonomous intersection management (AIM). Most research to date has only looked at how best to implement a solution for a single intersection. We have created a simulation that runs in real time, where up to several dozen intersections appear side by side. In this work, we conduct experiments where we test different layouts of the autonomous algorithms along with traffic lights. Autonomous intersections clearly win with their efficiency, and in larger cities it's most advantageous to deploy them at the busiest intersections.