

GROUP 34: Autonomous Vehicle Learning System (AVLS)

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ABSTRACT

The goal of the AVLS is the design and control of an autonomous vehicle, using networked communication, computer vision and route optimization. Lane and traffic indicator detection enable the robot to avoid obstacles and navigate a mock city testbed. Newly discovered paths between nodes are communicated to a centralized server and optimized over time. This study demonstrates important capabilities of autonomous travel as a widespread form of transportation.