This contribution provides a review of fundamental goals, development and future perspectives of driver assistance systems. Mobility is a fundamental desire of mankind. Virtually any society strives for safe and efficient mobility at low ecological and economic costs. Nevertheless, its technical implementation significantly differs among societies, depending on their culture and their degree of industrialization. A potential evolutionary roadmap for driver assistance systems is discussed. Emerging from systems based on proprioceptive sensors, such as ABS or ESC, we review the progress incentivized by the use of exteroceptive sensors such as radar, video, or lidar. While the ultimate goal of automated and cooperative traffic still remains a vision of the future, intermediate steps towards that aim can be realized through systems that mitigate or avoid collisions in selected driving situations. Research extends the state-of-the-art in automated driving in urban traffic and in cooperative driving, the latter addressing communication and collaboration between different
vehicles, as well as cooperative vehicle operation by its driver and its machine intelligence. These steps are considered important for the interim period, until reliable unsupervised automated driving for all conceivable traffic situations becomes available. The prospective evolution of driver assistance systems will be stimulated by several technological, societal and market trends. The paper closes with a view on current research fields.

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