

# Lane Line Detection using OpenCV

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***Abstract:** Many modern transportation systems use lane detecting systems, which are crucial components. Nevertheless, because of the various road conditions, it is a challenging task to implement. Humans employ their optical vision during vehicle operating to manoeuvre the vehicle. The creation of an open cv-based automatic lane detection system is one of the requirements for a self-driving car. Computer vision is a technology that enables cars to understand their surroundings and recognise the things in the video image. It is a subfield of artificial intelligence that enables software to comprehend the information of images and videos. The front of the vehicle has a camera that records the view of the road and can identify lane markings. There have been presented a number of techniques for locating lane markings on the road.*

**Keywords:** Lane System

## REFERENCES

- [1] Bar Hillel, Aharon, et al. "Recent progress in road and lane detection: a survey." Machine vision and applications 25.3 (2014): 727-745.
- [2] Kim, ZuWhan. "Robust lane detection and tracking in challenging scenarios." IEEE Transactions on intelligent transportation systems 9.1 (2008): 16-26.
- [3] Kaur, Gurveen, and Dinesh Kumar. "Lane detection techniques: A review." International Journal of Computer Applications 112.10 (2015).
- [4] Wang, Yue, Dinggang Shen, and Eam Khwang Teoh. "Lane detection using spline model." Pattern Recognition Letters 21.8 (2000): 677-689.
- [5] Assidiq, Abdulhakam AM, et al. "Real time lane detection for autonomous vehicles." 2008 Inte