



Detection of Sudden Pedestrian Crossings for Driving Assistance Systems

Gopu Sudarshan Reddy¹, Aruna Kumari Kakumani²

¹PG student, Department of Electronics and Communication Engineering,
VNR Vignana Jyothi Institute of Technology, Hyderabad, India.
sudarshan434@gmail.com

²Assistant Professor, Department of Electronics and Communication Engineering,
VNR Vignana Jyothi Institute of Technology, Hyderabad, India
aruna.kakumani@gmail.com

Abstract

In this paper, Detection of Sudden Pedestrian Crossings For Driving Assistance System based on ARM is designed, in which the embedded chip and the programming techniques are adopted. The central monitor which adopts S3C2440 chip as controller is the core of the whole system. First, USB camera video images are collected by the embedded Linux system, processed, compressed and transferred by the processing chip. And then detects, only the crossing pedestrians as early as possible just as they enter the view of the mounted camera using Open CV and maintains an alarm System to alert the Driver, and then slowly applies break system. Tests show that the presented Pedestrian detection system is reliable and stable. And it has a perfect application prospects with real-time.

Keywords: Video Capture, S3C2440A, Embedded Linux, DC Motor.

Full text: <https://sites.google.com/a/ijrit.com/papers/home/V1111123.pdf>