

SCIENTIFIC BULLETIN

Image processing, traffic monitoring, vehicle detection



AUTOMOTIVE SERIES

SOME PRACTICAL ASPECTS OF VIDEO IMAGE PROCESSING FOR TRAFFIC MONITORING

Authors
Elena NEAGU University of Pitesti, Romania Abstract
This paper reviews one of the main areas where machine vision techniques have been investigated, namely loop emulation. Here image processing technology is used to obtain the same form of data as that delivered by conventional vehicle detectors, namely vehicle count, speed measurement, headway and lane occupancy. The results reported here used a segmentation procedure with a three updating period to account for ambient light changes. Temporary traffic surveys may employ loop emulator systems when it is difficult or costly to install devices on or in carriageways. A video image taken from a convenient vantage point can be analyzed automatically in the laboratory to obtain the information required by traffic engineers.
Keywords