## UNIVERSITI TEKNOLOGI MARA

## **Estimation Of Extracted From Video Record**

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Thesis submitted in fulfilment

Of the requirement for the degree of

**Bachelor of Surveying Science and Geometic (Hons)** 

Faculty of Architecture, Planning and surveying

### **AUTHOR'S DECLARATION**

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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#### **Abstract**

Vehicle tracking has been applied in traffic surveillance with the intention of gaining traffic flow information, capturing traffic violations, and classifying vehicles. Vehicle tracking is an undertaking that can open possibilities for countless other applications. Most traffic detectors in service today work based on inductive loops buried under the road surface. Vehicle speed estimation is very important for traffic management. Which can determine and calculate with video recording. Extraction video based computer vision has become a promising technology for real time supervision, monitoring and estimation speed vehicle movement in road. Especially considering significance of Intelligent Transportation System, the vision based supervision has the significant contribution, as it can facilitate real time monitoring, vehicle tracking and identification. This method is used speed calculation from video record for tracks the movement of vehicles with system computer. It is found that the estimation of speed achieved for accurately calculate vehicle speed. Vehicle speed calculated is the same as vehicle speed in real time. Vehicle speed accuracy can be recognized and verified by comparing GPS speedometer records.

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