

Abstract

People counting in public places gives many functionalities, for surveillances and monitoring in security facilities and for research tools in marketing facilities. This final project will create a people counting system with the implementation of ViBe (Virtual *Background* Extractor) that separates *background* and capturing the *foreground* on a video and using curve analysis method for people counter. The video dataset that will be used in the system are taken with overhead mounted camera. With combining this two methods in a people counting system, for a case that there is no people overlapping or lining up tightly and passing through the ROI together, yield 100% accuration result, however if the case above is appeared the accuration will be decreased. From the average of all the experiment with eight scenarios and twenty four cases generates 97% accuracy.

Key words : *people counting, curve analysis, virtual background extractor, overhead mounted camera*