



<b>Course Title:</b>	Artificial Intelligence	<b>Semester:</b>	Spring-2019
<b>Course Code:</b>	SE-126	<b>Max Marks:</b>	10
<b>Instructor:</b>	Engr. Afzal Ahmed	<b>Deadline:</b>	<b>29<sup>th</sup> OCT, 2015</b>
<b>INSTRUCTIONS:</b> i. There shall be no submission after deadline. ii. Report shall follow the IEEE standards. iii. Copied assignments shall result in zero marks no matter who copied whom.			
<b>Title</b>	<b>Abstract</b>		
<b>Traffic Monitoring System</b>	Today, the revolutionary computer-tech industry is doing wonders for mankind that are unprecedented. Computer engineers need to play their role in alleviating the most fatal stigma faced by humans: Traffic Accidents and Rush Hours. To extract the images exclusively of fast moving vehicles at a highway and applying background removal processing techniques, the computer program could help predict the future course of the vehicle and stymie the possibility of an accident to occur. Motion vectors is a very useful resource in this regard. A lot of work has been accomplished on tracking man-driven vehicles but our project would have the upswing of foretelling traffic jams and auguring the probability of a vehicle to encounter an accident by predicting its future course using motion vectors. Our algorithms would be based on Python and OpenCV for tracking objects for their motion vectors. We would use a camera contraption to obtain a holistic geographic view of the highway to cover maximum possible routes and thus increase the efficacy of our algorithm. To test the durability of our hardware, we test our device on a number of different camera contraptions which produce the most efficient results along with testing it on different operating system. We use three frames and their absolute difference give us the detected vehicle. Stability techniques are used to mitigate the effect of vehicular headlights to make our project versatile to function at any time of the day.		

**Good Luck**