**CHAPTER 3**

**LITERATURE SURVEY**

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| **Author and Year** | **Paper Title** | **Abstract** | **Pros and Cons** |
| Sujin Bureerat  (May 2014) | Motorcyclist's Helmet Wearing Detection Using Image Processing | Uses neural network and image processing. | * More processing power required. * Training test data required. * Works well if constantly trained with changing input. |
| Shreya Bhagat, Thanu Sharma (May 2016) | Cascade classifier based helmet detection system using OpenCV | Uses similar approach. | * Takes rear image. * Very difficult to identify triple riding. * Difficult to distinguish b/w hair and helmet. |
| Rattapoom Waranusast, Nannaphat Bundon, Vasan Timtong and Chainarong Tangnoi | Machine Vision Techniques for Motorcycle Safety Helmet Detection. | Similar Approach . Side view Camera. | * Easy implementation and quick detection. * Low success rate when multiple motorcycle appear in the scene. * Do not detect triple riding. |