

| | |
|----------|---|
| Paper ID | 1570752709 |
| Title | Injury Identification Using Video Magnification |
| Author | Wessam Shehieb, Mohamad Alansari, Sara Al-Ansari and Ayman E. Tawfik (Ajman University, United Arab Emirates) |
| Email | w.shehieb@ajman.ac.ae |

Abstract

Despite the rapid technological advancements and developments that are achieved today, correct injuries diagnose is still a regular occurring issue. There are many methods to diagnose and determine injuries, but these methods are expensive and time consuming. In this work, a portable smartphone-based video magnification (VM) technique and machine learning algorithm Haar Cascade are used to detect injuries. The main objective of this work is to develop a worldwide accessible application that detects injuries in real-time manner using video magnification of the blood's colour circulated through the injured body part. The blood flow rate is used because since injuries directly cause an increase in blood flow rate. The proposed system was successfully implemented with accuracy of 95.07%.