Empowering Blind Tennis via Music

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 179
Number 24

Year of Publication: 2018

Authors:
Zainab Pirani, Pranav Kulkarni, Meer Ali Mehdi, Huzefa Nullwala, Karishma Khan, Misbah Sayyed

10.5120/ijca2018916437

Abstract

Lawn Tennis is one of the most popular sports all around the world. Especially, during last few years, a great deal of high-end technology is being used to follow every point of every match of the Tennis Tournaments. Unfortunately, visually challenged players cannot take the pleasure of following and playing this sport completely as they face the challenge of determining the position of the ball accurately on the court which increases their stress and anxiety levels and hence numerous players eventually give up. The training period is difficult not only for the visually-impaired players but also the coaches because the players have to be trained rigorously to determine how the ball is being hit, from where it is currently, and where the ball will land on the court. So, there is a high need for a system that makes the sport more enjoyable and less stressful for the visually-impaired people. Moreover, the existing system to play the sport of Blind Tennis makes use of sound balls, special balls that rattle when they bounce. This paper presents a comprehensive survey of Blind Tennis, the existing technologies that analyze the game and propose a system that would enable the visually-impaired people to not only play
Empowering Blind Tennis via Music

the sport but also follow the sport with enthusiasm just like general public by following every point of the match closely.

References


7. Ivan Culjak; David Abram; Tomislav Pribanic; Hrvoje Dzapo; Mario Cifrek,“A brief introduction to OpenCV”, Proceedings of the 35th Convention International on MIPRO, 2012 21-25 May 2012.


Index Terms

Computer Science
Information Sciences

Keywords

Blind Tennis, Object Detection and Tracking, Sound Generation, Computer Vision.