Aid for Visually Impaired Bowlers

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**Overview / Abstract:**

Sport is always meant to bring people together by knocking down barriers. Today, the greatest barrier that still exists in sport is that of inclusion of those who are physically impaired.

When it comes to bowling, an association in Hong Kong known as the Hong Kong Blind Sports Federation helps visually impaired bowlers play in public bowling alleys through personnel that tell them things they need to know while playing, such as how many pins remain and which pins have already fallen. However, this means they cannot practise on their own without help from others. Thus, we aim to fill this caveat to enable these players to showcase their talents, by implementing a pin detection algorithm which can be transmitted to a mobile application with audio feedback for the users, and create a permanent frame system which the users may take to the bowling alley on the day of practice.