**Skate Boarding Performance Videos Analysis Using Deep Learning (CNN and RNN hybrid)**

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**ABSTRACT**

We propose the use of deep learning to analyze various movements, jumps and tricks performed by professional skate boarders. A collection of 100 video clips of 30 secs duration were analyzed using an hybrid algorithm involving CNN (Convolutional Neural Network) and RNN (Recurrence Neural Network) on video clips tagged according to 12 different features, STANCE, MOVEMENT, POP, BODY MOVEMENT, SKATE MOVEMENT, BODY DIRECTION, SKATE DIRECTION, BODY MVMNT FLIP, SKATE MVMNT FLIP, SKATE MVMNT FLIP TYPE, FLIP, SHIFTY, WRAP. These features are used to categorize performance or overall style of skate boarder.

Each video was converted to 100 static frames stored in JPG format.