Team Name : RV_2_CS

Problem Statement : Automatic Highlights Generator by Sound Detection

Brief Idea:

The concept is to create an automated highlights generator powered by sound evaluation. This modern system will revolutionize how users engage with video content material, whether or not it's sports activities occasions, stay live shows, or long-shape movies.

By harnessing superior audio evaluation strategies, consisting of speech reputation and sound event detection, the gadget will identify exciting moments, crowd reactions, remark, or other enormous audio cues in real-time.

These detected audio events will then be seamlessly incorporated with the corresponding video pictures, ensuing in concise, interesting highlights.

Opportunity :

In a panorama where video content material is abundant, our automatic highlights generator primarily based on sound evaluation represents a singular method, setting it apart from existing thoughts. Unlike traditional video summarization techniques that rely entirely on video frames or metadata, our solution faucets into the auditory size of content. This precise approach allows us to create highlights which might be dynamic, engaging, and reflective of the emotional pulse of the content material.

Our innovation steps in to streamline this manner by way of automatically generating highlights that encapsulate the essence of the content material. This manner that users can effectively get admission to and experience the maximum thrilling and meaningful components with out the need for guide curation. In doing so, we reduce the workload on video editors.

List of features offered by the solution :

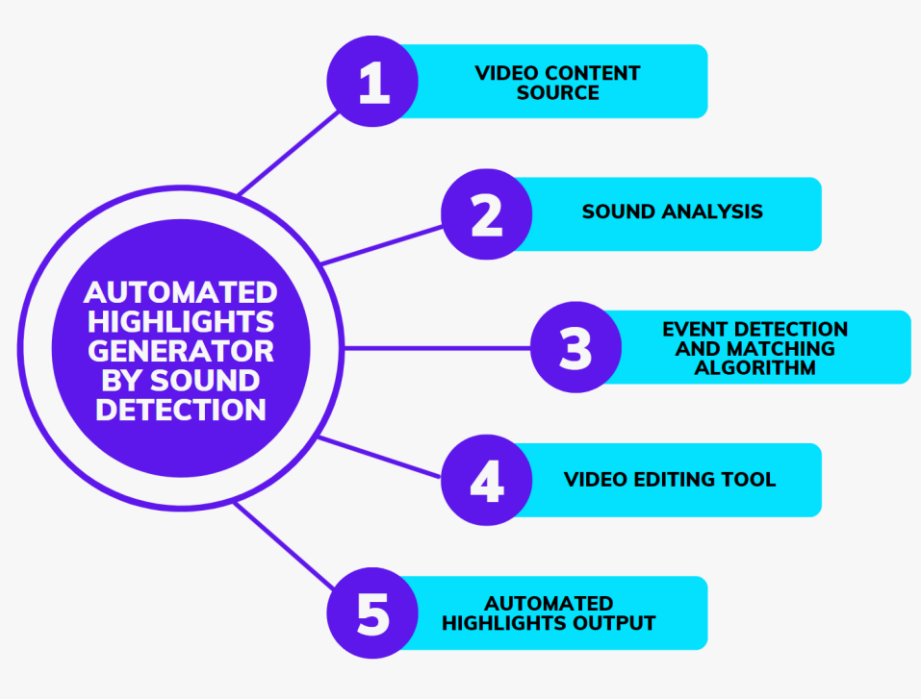
1. Sound Based Event Detection

2. Automatic Editing

3. Cost Reduction

4. Reduces Human work

Process Flow Diagram:



Business Logic of the solution

Content Licensing and Partnerships: Secure licensing agreements or partnerships with content,providers sports activities leagues, event organizers,and video platforms to get admission to and process their content material.

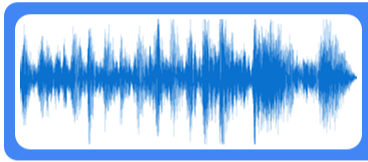
User Subscription Model Offer users a subscription primarily based model to get entry to top class functions, consisting of customizable spotlight criteria, offline downloads, and advert-free viewing.

Freemium Model Provide a unfastened tier with basic highlights and restrained customization alternatives to attract users. Premium functions are unlocked with a subscription.

Content Creators and Platforms Collaborate with content material creators and video-sharing systems to combine the highlights generator into their systems, permitting them to offer price-brought functions to their customers.

Ad Revenue Generate revenue through advertisements that may be displayed inside the highlights or on the user interface. Ensure advertisements are non-intrusive to the consumer revel in.

TECHNOLOGY USED



Audio Processing

Video Processing

Machine Learning and AI

Data Analytics and Monitoring

Estimated cost after implementing the solution :

1. Development Costs ($55,000 to $220,000)
2. Machine Learning Model Development ($10,000 to $50,000)
3. Analytics and Monitoring ($1,000 to $5,000 per year)
4. Legal and Compliance($5,000 to $20,000)
5. Scaling Costs:

   Costs can increase as the user base grows, and additional infrastructure is required.

ICC | NIUM

NEXT IN 2.0

<GLOBAL CRICKET HACKATHON/>

THANK YOU