

# AISCORE: AI-Based Real-Time Sports Scoring and Commentary System

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## Abstract

AISCORE is an innovative AI-powered system designed to automate real-time scoring and commentary generation in sports events. This system uses voice input to capture live game events, calculates scores dynamically through rule-based logic, and provides real-time feedback through synthesized speech. Modules such as voice\_input, scorer, commentary, and tts\_feedback work together to enhance the experience for both organizers and viewers. AISCORE aims to assist in grassroots and small-scale tournaments by reducing manual workload and providing an immersive experience.

Key Words: sports analytics, real-time scoring, commentary generation, Python, speech recognition, AI.

## 1. INTRODUCTION

Manual scorekeeping and commentary in sports events, especially at local or grassroots levels, is often inconsistent and prone to errors. AISCORE addresses this problem by introducing an automated system that leverages artificial intelligence and voice technologies to simplify and enhance the scoring process. This paper explains the architecture, workflow, and modules involved in the development of AISCORE.

## 2. SYSTEM DESIGN AND METHODOLOGY

The AISCORE system is composed of several Python modules:

- voice\_input: Captures voice commands and converts them to text.
- scorer: Interprets the text and updates scores based on game rules.
- commentary: Generates natural language commentary based on game events.
- tts\_feedback: Converts commentary to speech for real-time feedback.

The backend is developed using Python with libraries like SpeechRecognition, pyttsx3, and rule-based logic for scoring.

## 3. RESULTS AND DISCUSSION

The system was tested in a simulated environment and successfully interpreted voice commands to update and announce scores. Real-time feedback via speech synthesis was clear and consistent. AISCORE significantly reduced human intervention and ensured consistent game updates.

## 4. CONCLUSION

AISCORE demonstrates the effectiveness of combining voice recognition and rule-based logic to automate sports scoring and commentary. This system is particularly beneficial for local tournaments and can be extended to multiple sports with minor adjustments.

## REFERENCES

1. Python SpeechRecognition Library: <https://pypi.org/project/SpeechRecognition/>
2. pyttsx3 Text-to-Speech Conversion: <https://pypi.org/project/pyttsx3/>
3. Real-Time Scoring Systems: A Review of AI Applications in Sports