

# UNIVERSITY OF WESTMINSTER#

## INFORMATICS INSTITUTE OF TECHNOLOGY In Collaboration with UNIVERSITY OF WESTMINSTER

### "Switch-ML"

### Requirements of Suitable Cricket Player Replacement With Applying Machine Learning Techniques

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### **Abstract**

Cricket is a popular, fast-growing sport. Every team in a cricket match wants to win. Cricket is a highly dynamic sport with multiple elements in play at any time, and a team must make essential decisions to win. Which players will play together is a critical aspect of a team. Before making any judgment about players, several organizational factors must be addressed. Cricket's rising reputation, competition, and financial component have complicated this process. In recent decades, selecting a team and replacing players has been widely publicized. They were manually picking previous cricket players and specialists. Its conclusion is highly disputed because it is based on human intuition and prejudices. Cricket has long required a data-driven selection procedure.

The Switch-ML predicts player performance. A Cricket Board or team may utilize Switch-ML to understand players perform better. Using evidence reduces ambiguity in cricket team selection. Due to issue misunderstanding, earlier initiatives yielded mediocre outcomes. Current methods use standard Cricket measures to assess and predict player performance, which is ineffective. Switch-ML analyzes a player's skill and temperament, giving it an edge over other algorithms. Players are defined by their recent home and away results. Switch-ML employs player characteristics and a bespoke machine learning model.

Switch-ML predicts player performance. It might help a Cricket Board or a Cricket team understand player performance. Evidence-based team selection reduces uncertainty. Past attempts failed due to poor topic understanding. The present methods examine and predict player performance using standard Cricket metrics, which has proven ineffective. Switch-ML analyzes a player's skill and temperament, giving it an edge over previous algorithms. Recent, home, away, and total results characterize players. Switch-ML beats previous systems using player characteristics and machine learning.

**Keywords:** Predictive Model, Machine Learning, Supportive Vector Machine, Booting, Statistic Learning, Supervised Learning, Un-Supervised Learning

#### **Subject Descriptors:**

- 1. Computing Methodologies >> Machine Learning >> Natural Language Process
- 2. Computing Methodologies >> Machine Learning >> Machine Learning Algorithms >> Feature Selection

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