



Peer Reviewed Referred
and UGC Listed Journal
(Journal No. 40776)

ISSN 2277 - 5730
AN INTERNATIONAL MULTIDISCIPLINARY
QUARTERLY RESEARCH JOURNAL

AJANTA

Volume-VIII, Issue-I
January - March - 2019
English Part - II

IMPACT FACTOR /
INDEXING 2018 - 5.5
www.sjifactor.com

Ajanta Prakashan



CONTENTS OF ENGLISH PART - II



S. No.	Title & Author	Page No.
12	Hypocrisy in Ibsen's 'Ghosts' Dr. Vivek R. Vishwarupe Manoj Namdeorao Bhagat	59-63
13	Creativity & Innovation in Sports - Unlimited Thinking - Unlimited Performance Abhay Y. Bhisma	64-68
14	The Top 10 Fitness Trends for A Fitter 2018 Dr. Rajendra M. Kshirsagar	69-73
15	A Study of Digital Marketing and It's Impact on Consumer Behaviour Shubhangi Gore	74-78
16	A Study of Emerging Ecommers Trends Dr. Ranjana J. Mahajan	79-84
17	7Dimensional Technology in Cinema and Entertainment World Prof. Dr. Aruna R. Chudasama	85-89
18	Ways to Integrate Technology into Physical Education Dr. Vikas R. Tone Prof. Kishor D. Raut	90-91
19	Role of ICT in Family Resource Management Education Prof. Ujwala Tikhe Kandalkar	92-95
20	The Trend of Online Shopping in 21st Century Prof. Dr. Pradeep Damodarrao Darware	96-100
21	Advantages of M-commerce Dr. B.P. Adhau	101-104
22	Artificial Intelligence (AI) and Sports Performance Parag Joshi	105-107
23	An Overview of Online Marketing Dr. Rajesh M. Deshmukh	108-110

22. Artificial Intelligence (AI) and Sports Performance

Parag Joshi

B. D. P. College Pandharkawada.

Abstract

Artificial Intelligence (AI) is beginning to play a key role in allowing wearable tech. devices to provide a useful statistics derived from performance measurements that allow athletes to improve their training and therefore their performance.

By processing machine learning readings using AI, it is possible to start with a smaller amount of data and gradually train the ML models with more data over time to improve accuracy and helps athletes to achieve their best.

Key words : Artificial Intelligence, Machine Learning Game Changer, Sports Analytics.

Introduction

Artificial Intelligence (AI) became accessible to everyone now. Its application being used in a number of different domains. Video games, PUBG on line multiplayer battle royal game during Pariksha per charcha 2.0, Prime Minister Narendra Modi was told by a concerned mother that her son was addicted to online games and was neglecting his studies. The PM replied "PUBG wala hai kya?" to the great amusement of the audience. In particular have leveraged AI to assist and direct gaming character/avatars to act in a human way and to assist the characters in their interaction with game or other players.

AI makes it possible for machines to learn from experience, adjust to new inputs and perform human like tasks. Most of AI examples that we hear about today-from chess-playing computers to self driving cars, rely heavily on deep learning and natural language processing. Using these technologies, computers can be trained to accomplish specific tasks by processing large amounts of data and recognizing patterns in the data.

I try to cover ways artificial intelligence tech, in particular, is impacting sports now and in the future.

- **Sports performance and wearable technology**

Machine learning-an area of AI, is when a computer programmed to mimic human cognitive functions such as learning and problem solving. With wearable technology-like Apple Watch, Fit

- Predicting the performances of teams or individual players
- Predicting the outcome of a game

Sports analytics can be utilized in various domains including :

utilize. analytics should be able to extract valuable actionable insights for the Coaches and Managers to game data and individual players performance data. These advanced and sophisticated type of insight about potential players performance based on the use of a variety of data sources such as Sport analytics is comprising the process of identifying and acquiring the knowledge and applied to sports in a range of ways with data science.

• Sports Analytics Revolution

Machine learning is changing sport performance now and in the future and it can be affecting sports performance that are impossible for us humans to detect. us process vast amounts of statistical data with less effort than ever and can even identify factors even movement classifications by them. For events like fore hand back hand, volleys etc. All lets movements such as the way the players are holding a racket, what serve or shot they are doing or Readings from wearables allowing human coaches to be analyzed for inefficient to patterns for a forehand shot, compared with a backhand equivalent. when different event occur. For example, a wrist-worn device will read different movement movement in real time which provide continuous movement information that shows variations Wearables contain smart sensors such as accelerometers or gyroscopes can track body, goals by making judgements based on what they can see.

• Coaching and wearable Technology

Often, athletes will need a coach to give them direction on how to improve their form, and to spot mistakes and inefficiencies while watching a game. Coaches typically set targets and Wearables contain smart sensors such as accelerometers or gyroscopes can track body, out levels and over all fitness. Some wearables are even used during games, for use in post game performance analysis- measurements that allow athletes to improve their training and Wearable tech. is used by most teams as they practice, to track sleep patterns, diet, work performance. Bit and others is so pervasive that almost anyone can access data on their activity levels, hearts rate, nutrition and other healthy statistics. Just imagine, how helpful this data can be for athletic performance.

- Building new strategies for upcoming competitions
- Deciding the price of a player if club was to rent/sell/buy him/her
- Connecting players to brands and sponsors

With machine learning and predictive analytics, enabling coaches to identify weaker or stronger players, their physical state and supporting their decisions when it comes to whom to replace during match or whom to keep on the bench. And by studying patterns of play and player movements, coaches can reconfigure play strategy to make use of each players strengths and offset their weakness to improve overall team performance. Overtime, coaches can study the impact of data-driven decisions and strategies on overall player and team performance by analyzing the change in player data.

Conclusion

Improvements in technology and machine learning continue to progress the field towards artificial intelligence and real time use in sport. But is it possible that artificial intelligence will ever replace the Coach/Manager?

Suggested Reading

- <https://www.sporttchie.com/puma-product>
- <http://www.telegraph.co.uk/tennis>

Reference

1. Novatchkov H, Baca A, Artificial Intelligence in sports on Example of weight training, J sports science, 2013/2:27-37
2. Woo M, Artificial Intelligence in NBA, Inside Science 2018
<https://www.insidescience.org>
3. Flood K, Leveraging AI and ML in Games, Sports gambling news.
<http://www.sportsgambling.news>
4. Debrule S, Artificial Intelligence and Human Less Sports, A weekly Round up of ML and AI News <http://machinelearnings.co>