

**INTERNATIONAL CONFERENCE on
RECENT TRENDS IN COMPUTER SCIENCE, TECHNOLOGY,
DATA SCIENCE AND APPLICATIONS**

ICRTCTDA-2025

**7th February
2025**



Organized by

**Department of Computer Science,
Department of Computer Applications,
Department of Information Technology,
Department of Data Science &
Department of Mathematics**

**VIDYASAGAR COLLEGE OF ARTS AND SCIENCE
in association with**

SRI AANDAL EDUCATIONAL TRUST



CONTENTS

SNO	Paper ID	Title	First Author Name	Page No
1	ICRTCTDA 2025- 1001	Safeguarding Tomorrow: A Comprehensive Review of Internet of Things Security Measures	M N Karuppusamy	1
2	ICRTCTDA 2025- 1002	A Profound Analysis of IOT in Agriculture	Dr. K. S. Leelavathi	1
3	ICRTCTDA 2025- 1003	A review of text summarization methods using machine learning algorithms	Mrs. N. SASIKALA	2
4	ICRTCTDA 2025- 1004	A Review on Energy Aware Multipath Routing Protocols for Wireless Communication	Ramya K	3
5	ICRTCTDA 2025- 1005	A study on impact of artificial intelligence in quantitative trading	Ms. Sameen Patel	3
6	ICRTCTDA 2025- 1006	A SURVEY OF OFF-COURT FACTORS AFFECTING THE PERFORMANCE OF BADMINTON PLAYERS	Mrs. M. DHAVAPRIYA	4
7	ICRTCTDA 2025- 1007	Role of AI in Cyber Security	Abinaya A	5
8	ICRTCTDA 2025- 1008	Role of Generative AI in Transforming Data Engineering	Prabhakaran S	5
9	ICRTCTDA 2025- 1009	Enhancing Automotive Cybersecurity: Challenges, Case, Studies, Solutions and Future Directions	Sri Hari Manikandan	6
10	ICRTCTDA 2025- 1010	An Overview of Chatbot Technology	Sruthila R	7
11	ICRTCTDA 2025- 1011	ENHANCING VOIP NETWORK EFFICIENCY BY IMPLEMENTING VLANS AND INTER-VLAN ROUTING IN A SIMULATED ENVIRONMENT	V.Shanmugalexshmi	7
12	ICRTCTDA 2025- 1012	CONSUMER-CENTRIC MARKETING: STRATEGIES FOR BUILDING STRONGER CONNECTIONS IN GHANSOLI	Aditi Sunilkumar	8
13	ICRTCTDA 2025- 1013	Advanced Machine Learning Techniques for Call Fraud Detection : A Comprehensive Study	AKASH K	9
14	ICRTCTDA 2025- 1014	AI in Climate Change Policy and DecisionMaking: A Review	KAVIYAN S	9
15	ICRTCTDA 2025- 1015	Tech-Savvy :Teaching Embracing AI for Enhanced Educational Success	Dr.S.Suganyadevi	10
16	ICRTCTDA 2025- 1016	AI-Based Solution for Efficient Waste Management in Smart Cities	BARATHVIKRAMAN S K	11

practice prior to the inception of AI. It then investigates the specific AI techniques used in quantitative trading, such as machine learning algorithms, natural language processing, and deep learning models. The said technologies help the participants to process huge amounts of data, identify complex patterns, and develop decisions that are data driven in realtime. Moreover, the study delves into the edges and shortcomings related with AI-led quantitative trading strategies. Benefits include improved predictive accuracy, lowered human bias, and the competence to capitalize on market inefficiencies briskly. On the contrary, challenges such as model interpretability, data quality issues, and regulatory considerations are also queried. In conclusion, the study accentuates the transformative consequence of AI on quantitative trading, highlighting its role in shaping the future of financial markets. It discusses probable future trends and areas for further research, ultimately contributing to a profound understanding of AI's evolving role in finance.

ICRTCTDA 2025 -1006

A SURVEY OF OFF-COURT FACTORS AFFECTING THE PERFORMANCE OF BADMINTON PLAYERS

Mrs. M. Dhavapriya, Assistant Professor, Department of Computer Science, NGM College,
Tamilnadu, India. Email: dhavapriya@ngmc.org

Abstract

While on-court performance is crucial in badminton, off-court Badminton player performance is not only determined by on-court skills and physical training but also significantly influenced by various off-court factors. This survey examines key off-court elements that impact player performance, including mental health, nutrition, sleep patterns, social support, academic or professional responsibilities, and coaching dynamics. Through a combination of interviews, surveys, and secondary data analysis, the study identifies critical correlations between these factors and athletic outcomes. The findings highlight that psychological well-being, including stress management and motivation, plays a pivotal role in maintaining focus and resilience. Balanced nutrition and proper hydration are essential for sustained energy and recovery, while consistent sleep patterns support physical and mental rejuvenation. Social support from family, peers, and coaches provides emotional stability and enhances confidence. Conversely, unmanaged stress, poor time management, and external pressures like academic or career demands can detract from a player's