



**SRI VENKATESWARA COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous)**

DEPARTMENT OF INFORMATION TECHNOLOGY

CIRCULAR

Date: 10-03-2025

It is hereby informed that our department is planned to organize one day seminar to III Year students of IT department on the topic “**Future Trends in Association Rule Mining**” on **11-03-2025**. All the III Year students of IT Department are instructed to attend the seminar without fail.

HOD - IT

Copy to:

1. Principal sir for kind information
2. Circulate among the faculty
3. Circulate among the students



**Sri Venkateswara College of Engineering and Technology
(Autonomous)**

R V S Nagar, Chittoor, Andhra Pradesh, 517127 India

Department of Information Technology in Association with ITEA, SVCET

Cordially invite you for the Online Seminar

“Future Trends in Association Rule Mining”

Resource Person

Mr. M Satish Kumar,

Associate Professor, MCA, M. Tech, SVCET.

Date: **11-03-2025**

Event Coordinator

Mr. P. Nandakumar, Asst. Prof/IT

HOD – IT

(Dr. J. Velmurugan)

Report on Guest Lecture: Future Trends in Association Rule Mining

Title: Future Trends in Association Rule Mining

Resource Person: Mr. M. Satish Kumar, Associate Professor, MCA, SVCET

Date: 11th March 2025

Time: 11:30 AM to 12:30 PM

Venue: Lecture Hall, IT Department, SVCET

Organized By: Department of Information Technology, SVCET

HoD-IT: Dr. J. Velmurugan

Coordinator: Mr. P. Nandakumar

Introduction

The Department of Information Technology organized a guest lecture on "Future Trends in Association Rule Mining" delivered by **Mr. M. Satish Kumar**, an esteemed Associate Professor from **MCA department, SVCET**. The session was conducted on **11th March 2025** from **11:30 AM to 12:30 PM** in the Seminar Hall. The lecture aimed to enlighten students about emerging trends, applications, and advancements in association rule mining within data science and machine learning domains.

Objectives

The primary objectives of the guest lecture were:

- To provide insights into the fundamentals of **Association Rule Mining (ARM)**.
- To discuss **recent advancements** and **future trends** in ARM techniques.
- To explore the integration of ARM in various real-world applications such as **market basket analysis, fraud detection, and recommendation systems**.
- To highlight the role of **AI** and **Big Data** in improving association rule mining methods.

Key Highlights

During the session, Mr. Satish Kumar covered the following topics in detail:

- **Introduction to Association Rule Mining:** Fundamental concepts, Apriori algorithm, and FP-Growth algorithm.
- **Challenges in ARM:** Issues related to scalability, data sparsity, and performance optimization.
- **Advanced ARM Techniques:** Utilization of deep learning models, hybrid algorithms, and evolutionary strategies for efficient rule generation.
- **Applications:** Real-world applications in **e-commerce**, **healthcare**, **cybersecurity**, and **social network analysis**.
- **Emerging Trends:** Leveraging cloud computing, blockchain, and edge computing to enhance ARM efficiency.

Interactive Session

The lecture was followed by an engaging **Q&A session** where students actively participated. Mr. Satish Kumar addressed queries regarding the application of ARM in **retail analytics**, **bioinformatics**, and **IoT systems**. He also provided valuable insights into career opportunities in data science and artificial intelligence for aspiring IT professionals.

Outcomes

The guest lecture proved to be highly informative and beneficial for the students. Attendees gained a comprehensive understanding of advanced techniques in ARM and their practical applications. The lecture also motivated students to explore research opportunities in data mining and machine learning domains.

Conclusion

The session concluded with a vote of thanks delivered by **Mr. P. Nandakumar**, expressing gratitude to **Mr. M. Satish Kumar** for his insightful presentation and dedication to enhancing students' knowledge. The event was highly appreciated by both students and faculty members for its informative content and engaging delivery.

Screenshots





