



**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 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







