BVRIT HYDERABAD College of Engineering for Women
(Approved by AICTE | Affiliated to JNTUH)
(NAAC Accredited – A Grade | NBA Accredited B. Tech. (EEE, ECE, CSE and IT))
Bachupally, Hyderabad -500 090

Name of the Event: Who Afraid of Concurrent Programming

Date(s) of Conduction: 21-11-2023

No. of Participants: 150

Resource Person(s) with designation: Prof Madhavan Mukund, Director, CMI, Eminent Speaker, ACM

Faculty Co- coordinators: Dr.B.Lakshmi Praveena, HOD,CSE(AI&ML),

About the Event:

A guest lecture on **"Who's Afraid of Concurrent Programming"** was delivered by **Prof. Madhavan Mukund**, an esteemed academic and leader in Computer Science. The talk provided insights into the challenges and solutions in concurrent programming, a vital area in modern software development.

Prof. Mukund, a B.Tech graduate from IIT Bombay and Ph.D. holder from Aarhus University, is a Professor and Dean at Chennai Mathematical Institute. His research focuses on **formal verification**. He serves as President of the Indian Association for Research in Computing Science (IARCS) and Vice President of the ACM India Council. Prof. Mukund is also known for his contributions to the Indian Computing Olympiad and the International Olympiad in Informatics.

The lecture began with an overview of concurrent programming, emphasizing its importance in solving real-world problems like managing **eCommerce websites** and **mobile applications**. Prof. Mukund discussed **data consistency** in synchronized and unsynchronized threads, illustrating concepts with case studies like the **Pearson problem**.

He elaborated on challenges at two levels:

- **Processor level:** Addressing complexities arising from **relaxed memory models** designed to optimize sequential code.
- **Network level:** Introducing **eventual consistency**, a concept crucial for distributed systems such as **Facebook like counters** and **Amazon shopping carts**.

Photos:
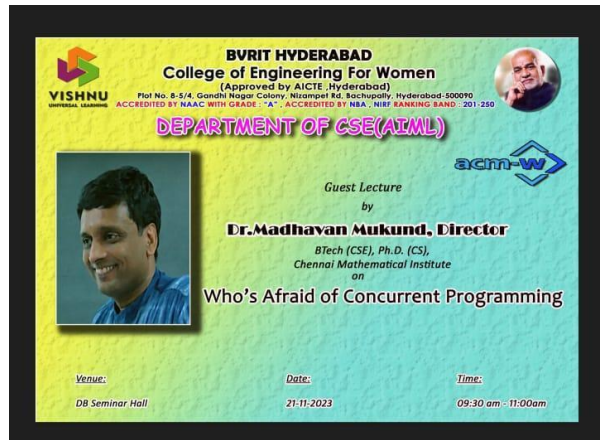
The session highlighted traditional tools like locks, semaphores, and monitors, while emphasizing how multicore processors and distributed systems demand programmers to address concurrency issues routinely.

The talk was engaging, blending technical depth with practical examples, making it highly informative for students and professionals alike

Praveena

Sign of HoD