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: Linux Kernel Application to Embedded Systems

Date(s) of Conduction (DD-MM-YYYY): 07-06-2024

No. of Participants: 157

Resource Person(s) with designation (if applicable): Mr. U Rajanikant (Sr. Architect, L&T Technology Services, Hyderabad).

Faculty Co- coordinators: Ms.B.Sujatha,Associate Professor, EEE

About the Event:

Architecture: Detailed exploration of Linux history and architecture, including the kernel, user space, and system calls. Explanation of the Linux file system structure, file types, and directory hierarchy

Virtual Memory: Discuss how virtual memory works and its importance in modern operating systems.Memory Allocation Strategies: Examining different memory allocation techniques, including dynamic and memory paging.

Network Protocols:TCP/IP, HTTP, and SMTP: Detailed analysis of these protocols, their functions, and their significance in network communication.

Embedded C Language:Introduction to the syntax and applications of embedded C, highlighting its importance in developing software for embedded systems.

Lab Exercises:C Program on Memory Layout: Practical exercises that allowed participants to understand memory organization, including the stack, heap, and data segments, and how variables are stored and accessed in memory.

Applications: The resource person highlighted the application of Linux-integrated embedded systems in set-top boxes, Wi-Fi routers, and other similar devices.

Interactive Session: The session included interactive discussions where students engaged with the speaker, asking questions and clarifying doubts related to the topics covered.

Feedback: The lecture was well-received by the students. Many students expressed their interest in learning the Linux operating system and embedded C codingto further enhance their skills after being inspired by the lecture

Conclusion: The guest lecture was well received by studentsand offered participants a comprehensive understanding of Linux kernel applications in embedded systems. Through both theoretical discussions and practical lab exercises, students gained valuable insights into essential concepts of computer science and software engineering. The Department of Electrical and Electronics Engineering extends its gratitude to Mr. U Rajanikant for his invaluable contribution and looks forward to organizing more such enlightening sessions in the future.

Photos:

Signature of Faculty Co-ordiantors   **Sign of HoD**