



PBR VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE (AUTONOMOUS)

(Affiliated to J.N.T.U.A, Approved by AICTE and Accredited by NAAC)

KAVALI – 524201, S.P.S.R Nellore Dist., A.P. India. Ph: 08626-243930



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

EVENT REPORT

Name of the Event : Guest Lecture on “ENGINEERING AND SOCIETY”

Date : 03-11-2021

Time : 2.30 PM to 3.30 PM

Participants : III B. Tech. CSE Students

Event coordinator : Mr. K. Naveed Kumar Reddy & Mr. G. Rajesh

Name, Designation & Address of Resource person

: Mr.Pramod MS,Dean Academics,PESU,Bengaluru.

OBJECTIVES :

- To understand the Wireless networks and its usage with today’s IT field.
- Making an awareness on Networks environment comparing to other technologies.
- To Develop ability to deal with Networking Domain.
- To Envisioned to become an essential part of our lives.
- To understand the Development of Engineering.

REPORT :

A Guest lecture was organized by the department of CSE on “ENGINEERING AND SOCIETY”. In this program 189 students and 12 faculty members were attended.

Mr. Pramod MS talked on Professional Ethics that refer to the Wireless Sensor Networks. In other words, it make Sensor Networks an essential part of our lives. Professional Ethics are standards or codes of conduct set by people in a specific profession.

The following topics were covered in the lecture – Infrastructure based and Infrastructure less Wireless networks Realtime Applications of Wireless Adhoc Networks, Fire monitoring and Alarm System for underground Coal Mines Bord and Healthcare for Wireless Body area Networks.

OUTCOMES: Students were able to

- Understand Impact of RFID tag technology on the healthcare industry and its contribution to improve the quality of patient care.
- Know that BIG DATA has completely changed the world we live in, from modern homes, bridges, space travel, cars and the latest mobile technology.
- Design Constraints need to be satisfied for realization of sensor networks.
- To provide information about **ethical responsibilities** related to the engineering profession



PBR VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE (AUTONOMOUS)

(Affiliated to J.N.T.U.A, Approved by AICTE and Accredited by NAAC)

KAVALI – 524201, S.P.S.R Nellore Dist., A.P. India. Ph: 08626-243930



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PHOTOS

Name of the Event : Guest Lecture on “ENGINEERING AND SOCIETY”

Date : 03-11-2021

Participants : III B. Tech. CSE Students

Name, Designation & Address of Resource person : Mr. Pramod MS,
Dean Academics,
PESU, Bengaluru.

The screenshot shows a Zoom Webinar interface. The main window displays a presentation slide titled "Ethics & Engineering and Society". The slide content includes:

- OBJECTIVE**
- To understand the development of engineering.
- To study ethic's perception and organisation.

Handwritten notes in red ink are present on the slide:

- Under "To understand the development of engineering": "Behaviour" and "Bad / Good right history".
- Under "To study ethic's perception and organisation": "Solve the problems (Science and maths)".

A diagram on the slide shows a box labeled "Patient" with two arrows pointing to boxes labeled "A" and "B". Box "A" is associated with "Best hospital" and "TOL". Box "B" is associated with "Average" and "TOL".

The Zoom interface also shows a "Participants (72)" list with "Faculty (Olympus)" and "Dr. Pramod M S" listed. The system tray at the bottom indicates the time is 2:48 PM on 11/2/2021.



PBR VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE (AUTONOMOUS)

(Affiliated to J.N.T.U.A, Approved by AICTE and Accredited by NAAC)

KAVALI – 524201, S.P.S.R Nellore Dist., A.P. India. Ph: 08626-243930



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The screenshot shows a Zoom webinar interface. The main content is a slide titled "Electronics and Society" with the sub-heading "Types of Node Behaviors". A flowchart illustrates the classification of node behaviors:

- Node
 - Normal
 - Misbehaving
 - Unintentional
 - Failed
 - Badly Failed
 - Intentional
 - Selfish
 - Malicious

The "Selfish" node in the flowchart is circled in red. The Zoom interface shows 32 participants, with a list of names on the right including M.LAVANYA, Mahendra THATBOINA, Mjv Sumanth, Naveed Kumar Reddy, Nivas Reddy, P.Anusha, PULIMI AMULYA, Raja Reddy, Sampath Chekuri, Shailu Sunkesula, Sruthi, and Sudu.

The screenshot shows a Zoom webinar interface. The main content is a slide titled "Electronics and Society" with the sub-heading "WSN".

- Definitions:**
 - Sensing range r_s
 - Transmission range r_t
- Relationship between coverage and connectivity**
 - If **transmission range** $\geq 2 * \text{sensing range}$,
 - coverage implies connectivity
- Most sensors satisfy the condition!**
 - Coverage** is the main issue

Two diagrams illustrate the concepts. The first diagram shows a central node with a blue sensing range circle and a red transmission range circle. The second diagram shows a node S with a sensing range circle and a transmission range circle, with points P and D marked.

The Zoom interface shows 31 participants, with a list of names on the right including M.LAVANYA, Mahe..., Mjv Sumanth, Naveed Kumar Reddy, Nivas Reddy, P.Anusha, PULIMI AMULYA, Raja Reddy, Sampath Chekuri, Shailu Sunkesula, Sruthi, Sudu, and Teladala kavitha.



PBR VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE (AUTONOMOUS)

(Affiliated to J.N.T.U.A, Approved by AICTE and Accredited by NAAC)

KAVALI – 524201, S.P.S.R Nellore Dist., A.P. India. Ph: 08626-243930



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Zoom Webinar | You are viewing Dr. Pramod M S' screen | View Options

Faculty (Olympus) | Faculty (Olympus) | Dr. Pramod M S

Recording... | **Electronics and Society**

Applications of Sensor Networks

Fire Monitoring and Alarm System for Underground Coal Mines Bord-and-Pillar Panel Using Wireless Sensor Networks

- WSN-based simulation model for building a fire monitoring and alarm (FMA) system for Bord & Pillar coal mine.
- The fire monitoring system has been designed specifically for Bord & Pillar based mines
- It is not only capable of providing real-time monitoring and alarm in case of a fire, but also capable of providing the exact fire location and spreading direction by continuously gathering, analysing, and storing real time information

Unmute | Start Video | Participants (30) | Q&A | Polls | Chat | Share Screen | Raise Hand | More | End

Participants (30): Panelists (2) | Attendees (28)

Q Search

- MT Mahendra THATIBOINA
- MS Mjv Sumanth
- NK Naveed Kumar Reddy
- NR Nivas Reddy
- P P.Anusha
- PA PULIMI AMULYA
- RR Raja Reddy
- SC Sampath Chekuri
- SS Shailu Sunkesula
- S Sruthi
- S Sudu
- TK Teladala kavitha
- VS Vakamalla sreenivasulu

Lower All Hands

3:45 PM 11/2/2021

Zoom Webinar | You are viewing Dr. Pramod M S' screen | View Options

Faculty (Olympus) | Faculty (Olympus) | Dr. Pramod M S

Recording... | **Electronics and Society**

Conclusion

- WSNs possible today due to technological advancement in various domains
- Envisioned to become an essential part of our lives
- Design Constraints need to be satisfied for realization of sensor networks
- Tremendous research efforts being made in different layers of WSNs protocol stack

Unmute | Start Video | Participants (28) | Q&A | Polls | Chat | Share Screen | Raise Hand | More | End

Participants (28): Panelists (2) | Attendees (26)

Q Search

- MT Mahendra THATIBOINA
- MS Mjv Sumanth
- NK Naveed Kumar Reddy
- NR Nivas Reddy
- P P.Anusha
- PA PULIMI AMULYA
- RR Raja Reddy
- SC Sampath Chekuri
- SS Shailu Sunkesula
- S Sruthi
- TK Teladala kavitha
- VS Vakamalla sreenivasulu
- VG Venkateswarlu Gunupati

Lower All Hands

3:49 PM 11/2/2021