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TODAY'S EVENTS @ SKCET

PLACEMENT- ACCENTURE HACK DIVA CONTEST

Accenture Hack Round 2 was held @ SKCET Labs for girl students today.

About the Event:

Accenture Hack Diva aims to bring together the brightest engineering women students and celebrate their passion for technology.

Two online rounds were conducted wherein complexity increased round by round. Students can choose their preferred language to code out of the 35+ programming languages on the platform. Top 3 women students from Engineering Colleges with the highest cumulative score from both the rounds will be announced as winners of the contest.

PLACEMENT- ACCENTURE HACK DIVA CONTEST

MECH - GUEST LECTURE ON ADVANCES IN AUTOMOTIVE INDUSTRIES

Department of **Mechanical Engineering** in association with **Society of Automotive Engineers** (SAE India SKCET Collegiate club) organized a Guest lecture on **'Advances in Automotive Industries'**. **Mr. B. Arun Muthu**, Research Engineer, Functional Development Department, ZF - AG, Germany was the resource person of the event. The lecture was on the advancements in Automotive Industries. Students were also given awareness on the Importance of Smart connected vehicles and topportunities in industries.

MECH - GUEST LECTURE ON ADVANCES IN AUTOMOTIVE INDUSTRIES : GLIMPSES

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ECE - GUEST LECTURE ON 'FIRMWARE UPDATE OVER THE AIR'

Department of **ECE** organized a Guest Lecture for the Second year students on **'Firmware Update over the Air'** (FOTA), a session on the emerging benefits in the field of Autonomous vehicles. **Mr. Kathirvelu Saminathan,** Function Safety Engineer, Robert Bosh, **prominent alumnus of the Department (2014)** was the resource person. A brief lecture on how function safety can be diagnosed remotely and preventive measures through data acquisition were deliberated the students.

IT - ZOHO CREATOR CERTIFIED ASSOCIATE PROGRAMME: DAY 3

Second year students from the Department of **CSE and IT** actively participated in the Day 3 of the **Zoho Creator Certified Associate Programme**, organized by the Department of **Information Technology**. The students were given a hand - on session on **Zoho Creator tool** and **soft skills training** by **Ms.Sowmya J**, Head-Training & operations, ITK Educational Services Pvt.Ltd.

CSE - SEMINAR ON 'PATHWAY FOR PURSUING HIGHER EDUCATION ABROAD'

As a part of Saturday Activity, a seminar on **'Pathway for pursuing Higher Education Abroad'** was organized by the Department of **Computer Science and Engineering** for the **Second** year students. The session was handled by **Mr.V.Arjun,** Consultant, Emerson Admissions, Coimbatore on higher education opportunities abroad, scholarships, expertise available and prospectives for continuing education and career opportunities.

MECH - GUEST LECTURE ON ELECTRIC VEHICLE DYNAMICS

Department of **Mechanical Engineering** in association with **Society of Automotive Engineers** (SAE India SKCET Collegiate club) organized a guest lecture on **'Electric Vehicle Dynamics & Smart Connected Automations in Industries'**. **Mr. Umang Surana**, Strategy & Growth head, Elite Techno Groups was the resource person of the event. In his lecture, he briefed the students about the basics of Electric vehicle dynamics. Students also gained knowledge on the design, development, and fabrication of the Electric Vehicles.

MECH - GUEST LECTURE ON ELECTRIC VEHICLE DYNAMICS: GLIMPSES

CSBS - KNOWLEDGE SHARING: SNAP TALK

As a part of class room activity, a knowledge sharing- snap talk session was facilitated by **Mrs.G.Ignisha Rajathi,** Assistant Professor, Department of CSBS. Student teams participated with great interest and presented their topics to the peer group.

Title: **Logical Storage and its connectivity**
Team Members: Hema Dharshini P and Nithish S
Title: **World Wide Web Storage**
Team Members: Yogeshwaran R and Dharika P

EEE- FINAL YEAR PROJECT REVIEW

Third project review was conducted for the **Final** year students of **EEE 'A'**.

Team of faculty members along with the project coordinator reviewed the

hardware demonstration and gave valuable suggestions for further

improvement in the output of the project.

CIVIL - OUTSIDE CLASSROOM LEARNING

As a part of **Outside Class Learning Experience,** Second year students from the Department of Civil Engineering visited a construction site near Selvapuram, under TNSCB pertaining to the subject 'Design of Reinforced Concrete'. Students gained knowledge on the following areas:

- Reinforcement details in column, water tank, beam

- Construction details of slab, plinth beam, lintel beam, lightweight bricks.

CIVIL - OUTSIDE CLAASROOM LEARNING :GLIMPSES

MECH - INDUSTRY VISIT

As a part of **Outside Classroom Learning activity,** an Industrial visit to **Prakash Gears,** Coimbatore was organised by the Department of **Mechanical Engineering** to the **Second** year students pertaining to the subject- Manufacturing technology II. Students gained a practical experience on gear manufacturing and various other aspects of machining process. **Mr. Vigneshkumar**, and **Mr. R. Arun Kumar**, Assistant Professors, Mechanical Engineering accompanied the students.

MECH - INDUSTRY VISIT:GLIMPSES

SOM - GUEST LECTURE ON 'INTERNATIONAL BANKING AND PERSONALITY DEVELOPMENT'

Mr.R.Kirubakaran, Branch Manager, State Bank of India, Kuniamuthur, addressed the First year MBA students on the topic '**International Banking and Personality Development'** on 13.03.2020.

ECE- GUEST LECTURE ON HIGHER STUDIES

Department of **ECE** organized a guest lecture on **'A Perspective on Higher Studies'.** The session was handled by **Mr. Vijwat Pahwa, Academic Associate Engineer, ACE Academy, Hyderabad.** He gave an outlook on the key ways to crack GATE in the primary attempt. Students interacted with the expert on the opportunities available.

MCT- INDUSTRIAL PROJECT REVIEW

Third Industrial project review was conducted for the **Final** year students of **Mechatronics Engineering** Department. **22 student batches** presented their industrial project to the panel members. Students were reviewed on the working of the project and status of journal submission. Suggestions were given by the panel members to improvise the projects for better output.

Design and Fabrication of Automated Adhesive Dispenser

Design and Fabrication of Spritz Bot

MCT- INDUSTRIAL PROJECT REVIEW: GLIMPSES

Design and Fabrication of Automated Mechanism for Chemical Pre-Treatment Process in Powder Coating.

Design and Fabrication of Automatic Inspection of Welding Electrode.

ECE - EXPERIENCE SHARING SESSION BY SOLITON PLACED STUDENTS

Third year Boot camp registered students of **ECE** department addressed the Second year students on the Bootcamp Screening Test process. The students shared valuable information and strategies on the important topics of focus and the ways to crack the test.

EEE- SPORTS ACCOLADE

Haricharan D.V, Third year student from **EEE 'A'** was rewarded as the **'Best Player' in** Chess (Men) category at Pramotsava, Annual Sports event of SKCET.

TECHNOGRAPHICS – FROM BITS TO YOTTABYTES

From Bits to Yottabytes!

Todays World is full of online information and data, but how much is there? Wrap your mind around what these numbers really mean!

For more ideas, visit @RobbotResources

Bit
Single Binary digit (I or O)

22 Bits = The word length limit of the first programmable computer which became operational in 1941; Konrad Zuse's Z3.

TRUE FALSE

= 0 / 1

Nibble
I Nibble = 4 Bits (O-15)

1 Nibble (0-15) = One hexadecimal character

Binary No. = $\frac{8\ 4\ 2\ 1}{1\ 1\ 1\ 1}$ = 15 Denary = F Hex

Byte
I Byte = 8 Bits (O-255)

1 Byte = One character

10 Bytes = One word

Aardvarks!

Kilobyte (KB)
I Kilobyte = 1024 Bytes

1 KB = Paragraph
100 KB = Low-resolution photo
128 KB = Memory of a standard calculator

= 1024 Bytes

Megabyte (MB)
I Megabyte = 1000 Kilobytes

5 MB = Complete works of Shakespeare
1 MB = Short novel

= 1024^2
1 048 576 Bytes

Gigabyte (GB)
I Gigabyte = 1000 Megabytes

4.7 GB = Size of a standard DVD-R
1 GB = 7 mins of HD-TV video
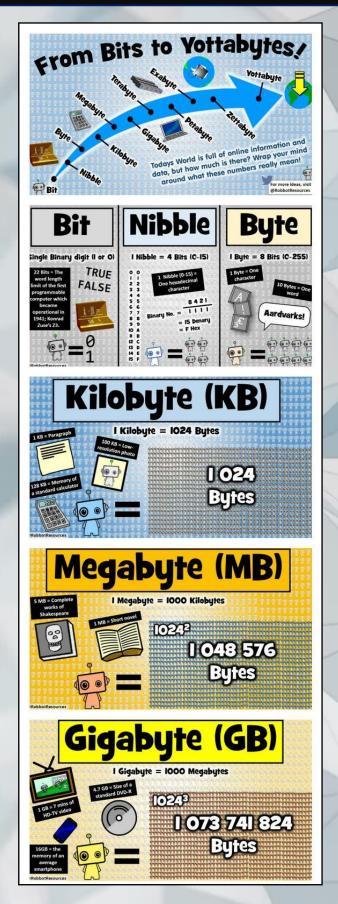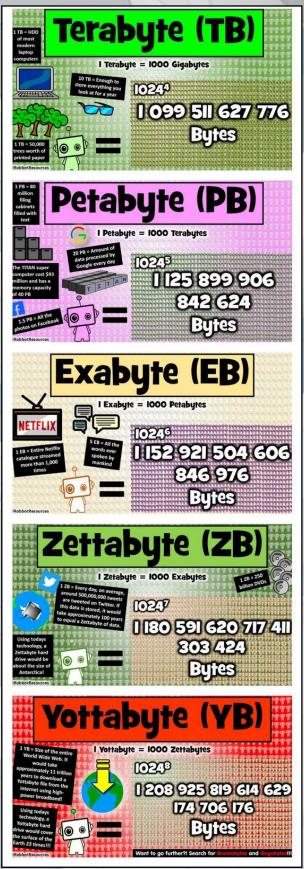16GB = the memory of an average smartphone

= 1024^3
1 073 741 824 Bytes

Terabyte (TB)
I Terabyte = 1000 Gigabytes

1 TB = HDD of most modern laptop computers
10 TB = Enough to store everything you look at for a year
1 TB = 50,000 trees worth of printed paper

= 1024^4
1 099 511 627 776 Bytes

Petabyte (PB)
I Petabyte = 1000 Terabytes

1 PB = 80 million filing cabinets filled with text
20 PB = Amount of data processed by Google every day
The TITAN super computer cost $93 million and has a memory capacity of 40 PB
1.5 PB = All the photos on Facebook

= 1024^5
1 125 899 906 842 624 Bytes

Exabyte (EB)
I Exabyte = 1000 Petabytes

1 EB = Entire Netflix catalogue streamed more than 1,000 times
5 EB = All the words ever spoken by mankind

= 1024^6
1 152 921 504 606 846 976 Bytes

Zettabyte (ZB)
I Zettabyte = 1000 Exabytes

1 ZB = Every day, on average, around 500,000,000 tweets are tweeted on Twitter. If this data is stored, it would take approximately 100 years to equal a Zettabyte of data.
1 ZB = 250 billion DVDs
Using todays technology, a Zettabyte hard drive would be about the size of Antarctica!

= 1024^7
1 180 591 620 717 411 303 424 Bytes

Yottabyte (YB)
I Yottabyte = 1000 Zettabytes

1 YB = Size of the entire World Wide Web. It would take approximately 11 trillion years to download a Yottabyte file from the internet using high-power broadband!
Using todays technology, a Yottabyte hard drive would cover the surface of the Earth 23 times!!!

= 1024^8
1 208 925 819 614 629 174 706 176 Bytes

Want to go further?! Search for Brontobytes and Gegobytes!!!

MECH – WORKSHOP ON IMPACT OF AUTOMATION IN INDUSTRIES

Department of **Mechanical Engineering** in association with **Society of Automation and Robotics** organized a Workshop on '**Impact of Automation in Industries**'. **Mr.P.Tatavaratharajapermal**, Consultant Trainer, VLAND'S Best hub private ltd., and **Mr.Sathish Kumar**, Zonal Manager, VLAND'S Best hub private ltd were the resource persons of the event. The lecture was to impart the importance of Automation and its impact on Industries in the minds of students. Students were given awareness on the placement opportunities in the field of automation and skills required to get placed in top MNCs.

MECH – WORKSHOP ON IMPACT OF AUTOMATION IN INDUSTRIES

Buzz

R&D – JOURNAL PUBLICATION:EEE

Journal of Ambient Intelligence and Humanized Computing
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ORIGINAL RESEARCH

Malicious node detection using heterogeneous cluster based secure routing protocol (HCBS) in wireless adhoc sensor networks

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Abstract
In wireless, every device can moves anywhere without any infrastructure also the information can be maintained constantly for routing the traffic. The open issues of wireless Adhoc network the attacks which are chosen the forwarding attack that is dropped by malicious node to corrupt the network performance then the information integrity exposure. Aim of the problem that existing methods in Adhoc network for malicious node detection which cannot assure the traceability of the node as well as the fairness of node detection. In this paper, the proposed heterogeneous cluster based secure routing scheme provides trust based secure network for detection of attacks such as wormhole and black hole caused by malicious nodes presence in wireless Adhoc network. The simulation result shows that the proposed model is detect the malicious nodes effectively in wireless Adhoc networks. The malicious node detection efficiency can be achieved 96% also energy consumption also 10% better than existing method.

Keywords Malicious nodes · Adhoc network · Security · HCBS · Energy consumption · Sensor nodes

1 Introduction

More than two sensor nodes are communicates with each other in order to cooperative function computation or collaborative computation which is comprised with WSN. The applications used in the network are medical monitoring, emergency-response networks, energy management, inventory management, logistics and battlefield management.
   Every node in network will support the more than one communication model like broadcast, unicast then multicast.

Moreover, the lifetime of the battery utilization is limited so the security mechanism is efficient in network Debroy et al. (2011). Usually Adhoc network contains numerous tiny nodes called sensor node (SN) which is placed in operational area for processing, sensing as well as aggregating the data. Natural environmental exposure then the unreliability inherent of wireless which makes the transmission through the network gets exposure with many attacks Bao et al. (2011). Recently, the emerging technology of Wireless Adhoc network can be gradually increased.

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Research Publications

PUBLISHED

Dr.V.Gomathy, Associate professor, **EEE** has published a SCI indexed paper titled 'Malicious node detection using heterogeneous cluster based secure routing protocol (HCBS) in wireless adhoc sensor networks' in **Springer - Journal of Ambient Intelligence and Humanized Computing** with an impact factor of **1.9**

CSE - GRAPHOGRAM

R.POOJA

II CSE B