

### **Dr.K.V. Subba Reddy Institute of Technology**

#### Kurnool, Andhra Pradesh 518218



#### **About The Department**

Department of CSE (Computer Science and Engineering) established in the year 2007offers B.Tech (Computer Science & Egg) with an intake of 60 seats, M.Tech (Computer Science & Egg) courses inthe year 2011 with an intake of 18 seats The Department has dedicated and qualified facultybesides good infrastructure for computing.

# Envisaging Quality Education through Hard Work.....

There is no substitute for Hard Work.......

## **Department** Newsletter

Volume: 7 Issue: I Jan-Dec, 2020

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DR. KVSRIT - CSE Department Newsletter Issue:(2020-21)

From the Editorial...

Greetings to all!

The department is cheerful to present the latest edition of the Department of CSE Newsletter, Volume: 6 Issue: 6. It motivates, enlightens and enables the Student & Staff community to focus on their goals and achieve more. This issue explores the hidden talents, commitment, involvement and achievements of the Department Students and Staff Community in their Extra and Co-Curricular activities to the world.

The quarterly newsletter of the Department of CSE covers the information about the Faculty Development Programme, faculty achievement, student activities and fourth coming events.

We look forward to your continued contribution and participation in this Newsletter. Your good ideas, comments or valuable suggestions about this may lead to enhance the quality and professionalism of this newsletter in forth coming editions. Thank you for choosing and spending time with this newsletter. We hope, this Newsletter encourage you to conquer more in your field.

Sd/-

**Editorial** 

#### **About Dr.KVSRIT:**

Dr.K.V. Subba Reddy Institute of Technology has been the leading institute in imparting value based Engineering Education since its inception in the year 2007 by Dr.K.V. Subba Reddy, Founder and Secretary of Vaibhav Educational Society. The institute maintains exponential development with respect to intake, placements and Research.

#### **About ELITE:**

ELITE is a department level news letter intended to showcase the excellence of the students in Curricular. Co-Curricular and Extra-Curricular activities. It includes the list of events organized by various student chapters student and faculty achievements etc. It also focuses on educating the students on certification courses by world class institutions, National and International Level events, free online learning materials etc. As this news letter aims at continuous development of the student, the name "ELITE" unanimously selected for this news letter.

#### **College Vision:**

To be a Leader in Technical
Education Recognized for
Excellence and Innovation with a
Focus on Holistic SocioEconomic Development.

#### **College Mission:**

- To Deliver Outcome Based
  Education infused with
  Experimental Learning through
  Well-Established Infrastructure.
- ✓ To Create a Conducive Environment to Develop Professional Skills, Nurture Innovation and Promote Interdisciplinary Research.
- To Develop Professionals through Innovative Pedagogy
  Focusing on Individual Growth,
  Discipline, Integrity, Ethics and Social Responsibility.To
  Foster Industry-Institution
  Partnerships Leading to Skill
  Development and
  Entrepreneurship.

#### Department Vision:

To be a Center of Academic Excellence in Computer Science and Engineering Education,
Research and Consultancy
Contributing Effectively to meet
Industrial and Societal needs.

#### **Department Mission:**

**M1**: To Impart quality technical education with global standards.

M2: To Provide a platform for harnessing Industry oriented technical skills with interdisciplinary research awareness.

M3: To Promote entrepreneurship and leadership qualities imbibed with professional ethics. And Engineering with Best Practices of Teaching-Learning Process Leading to Overall Professional Success.

# Programme Educational Objectives (PEOs):

PEO1: Graduates of the program will have a successful professional career in IT Industry.

PEO2: Graduates of the program will pursue higher education.

PEO3: Graduates of the program will develop computing systems for real-life problems.

# **Programme Specific Objectives (PSOs):**

PSO1: Apply Software Engineering Principles and Practices to provide software solutions.

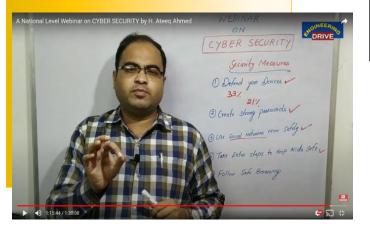
PSO2: Design and Develop Network, Mobile and Webbased Computational systems under realistic

constraints.

PSO3: Design efficient algorithms and develop effective code.

## **DEPARTMENTAL ACHIEVEMENTS:**

A Workshop on "Cyber security "by Presenting of B. Tech Students online was Organized by CSE Department on 10<sup>th</sup> March 2020.on 10<sup>th</sup> February 2017



A Online National Level Webinar on "Cyber Security "by Mr. H. Ateeq Ahmed, Assistant Professor, KVSRIT, was Organized by CSE Dep on 10<sup>th</sup> & 16<sup>th</sup> Mar, 2020



#### **GUEST LECTURE:**

MR. B. Krishna Kanth, Assistant professor SRIT Engineering College, Anantapur delivered lecture on Amazon Web Services to the students of III B. Tech on 19th August 2020.



Online on Amazon Web Service

### **Events:**

The Department of Computer Science & Engineering has conducted a Webinar on "A Guidance Program on Career Opportunities after B. Tech" in Collaboration with ACE Engineering Academy on 25-08-2020. Resource person for the Event is Mr. S. MM. Trinath. In this Event, Total 296 students have been participated



#### FACULTY DEVELOPMENT PROGRAM:

- ✓ M.SIVARAMULU attended Faculty Development Program on "Intellectual Property Rights "on 03<sup>rd</sup> to 05<sup>th</sup> August 2020
- ✓ Namul Nawaz attended Faculty Development Program on "Intellectual Property Rights "on 03<sup>rd</sup> to 05<sup>th</sup> August 2020
- ✓ DOULATH attended Faculty Development Program on "Intellectual Property Rights "on 03<sup>rd</sup> to 05<sup>th</sup> August 2020
- ✓ LEENA PARIMALA attended Faculty Development Program on "Intellectual Property Rights "on 03<sup>rd</sup> to 05<sup>th</sup> August 2020.
- ✓ HARDELY MOSSES attended Faculty Development Program On "Algorithm on Data Analysis on Cloud Computing" on 2<sup>nd</sup> to 4<sup>th</sup> March 2020.

### **Staff Achievements:**

- ✓ DR. C.MD. GULZAR has published a paper titled A PROJECT ON ENERGY AND MEMORY EFFICIENT CLONE DETECTION IN WIRELESS SENSOR NETWORKS in International Journal of Scientific Engineering and Technology Research ISSN NO: 0745-6999, Vol12, Issue4,2021Page No:510
- ✓ B. MAHESH has published a paper titled LOCATION PREDICTION ON TWITTER USING MACHINE LEARNING TECHNIQUES in international journal of creative research thoughts-(IJCRT) ISSN NO: 2249-7455 Page No: 198on Oct-2020 Vol.05, Issue.4.
- ✓ Dr.K. Pavan Kumar has published a paper titled ACHIEVE PRIVACY PRESERVING PRIORITY CLASSIFICATION ON PATIENT HEALTH DATA IN REMOTE E-HEALTHCARE SYSTEM in international journal of creative research thoughts-(IJCRT) ISSN NO: 2249-7455, Volume X, Issue IX, SEPTEMBER 2020,
- K. Samson Paul has published a paper titled CNN BASED PLANT LEAF DISEASE DETECTION in international journal of creative research thoughts-(IJCRT) ISSN:1005-0299, Vol.2041577Jan-2021No.01, DOI:10.10543/f0299.2021.

# STUDENT ARTICAL Deploying Wireless Sensor Network on Active Volcano

Augmenting heavy and power-hungry data collection equipment with lighter, smaller wireless sensor network nodes leads to faster, larger deployments. Arrays comprising dozens of wireless sensor nodes are now possible, allowing scientific studies that aren't feasible with traditional instrumentation. Designing sensor networks to support volcanic studies requires addressing the high data rates and high data fidelity these studies demand. The authors sensornetwork application for volcanic data collection relies on triggered event detection and reliable data retrieval to meet bandwidth and data-quality demands. Today's typical volcanic data-collection station consists of a group of bulky, heavy, powerhungry components that are difficult to move and require car batteries for power. Remote deployments often require vehicle or helicopter assistance for equipment installation maintenance. Local storage is also a limiting factor stations typically log data to a Compact Flash card or hard drive, which researchers must periodically retrieve, requiring them to regularly return to each station. The geophysics community has well established tools and techniques it uses to process signals extracted by volcanic datacollection networks. These analytical methods require that our wireless sensor networks provide data of extremely high fidelity a single missed or corrupted sample can invalidate an entire record. Small differences in sampling rates between two nodes can also frustrate analysis, so samples must be accurately time stamped to allow comparisons between nodes and between networks.An important feature of volcanic signals is that much of the data analysis focuses on discrete events, such as eruptions, earthquakes, or tremor activity. Although volcanoes differ significantly in the nature of their activity, during the deployment, many interesting signals spanned less than 60 seconds and occurred several dozen times per day. This let us design the network to capture timelimited events, rather than continuous signals.

#### **Sensor-Network Application Design**

Given wireless sensor network nodes current capabilities, we set out to design a data collection would meet the scientific that requirements we outlined in the previous section. Before describing our design in detail, let's take a high-level view of our sensor node hardware and overview the networks operation. Network Hardware The sensor network comprised 16 stations equipped with seismic and acoustic sensors. Each station consisted of a Moteiv Tome Sky wireless sensor network node an 8-dBi 2.4-GHz external omnidirectional antenna. seismometer, a microphone, and a custom hardware interface board. Each of 14 nodes are fitted with a Geospacer Industrial GS-11 geophone a single-axis seismometer with a corner frequency of 4.5 Hz oriented vertically. The two remaining nodes with triaxial Geospacer Industries GS-1 seismometers with corner frequencies of 1 Hz, yielding separate signals in each of the three axes. The Tome Sky is a descendant of the University of California, Berkeley's Mica mote, • sensor node. It features a Texas Instruments MSP430 microcontroller, 48 Kbytes of program memory, 10 Kbytes of static RAM, 1 Mbyte of external flash memory, and a 2.4-GHz Chicon CC2420 IEEE 802.15.4 radio. The Tome Sky was designed to run TinyOS,3 and all software development used this environment. The Tome Sky is chosen because the MSP430 microprocessor provides several configurable ports that easily support external devices, and the large amount of flash memory was useful for buffering collected data, as we describe later.

ESHARANI (18FH1A0501) III-II (CSE)