



KARNATAKA REDDY JANA SANGHA

VEMANA

INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi and Affiliated to VTU, Belagavi,
Recognized by Govt. of Karnataka)

Department Of

**INFORMATION SCIENCE &
ENGINEERING**

2015

**SCIENTIA
HUB**

AN EPITOME OF KNOWLEDGE

Message From



VIJAYARAGHAVA REDDY
CHAIRMAN, KRJS

CHAIRMAN

It gives me immense satisfaction by knowing that SCIENTIA HUB has promoted co-curricular activities just like how Vemana IT promotes education and quality learning. SCIENTIA HUB has always encouraged students to go beyond the ordinary and share their perspectives with fellow students. The newsletter promises excellent technical articles which has not only kept the students but also the faculty spellbound. I am proud to say that our students step in learn, explore then step out with self-confidence and knowledge. SCIENTIA HUB has played a major role in achieving this.



DR. VIJAY SIMHA REDDY B G
PRINCIPAL, VEMANA IT

PRINCIPAL

I heartily congratulate the department of ISE for their newest release of SCIENTIA HUB. This edition brings you the recent trends and advancements in technology. I also thank the editorial committee for their dedication and hard work. I would like to thank all our students for their contribution towards SCIENTIA HUB.



RAJANNA M
HOD OF ISE

HOD

It gives us an immense pleasure to introduce this Newsletter of Information science Engineering Named "SCIENTIA" it is the Latin word for knowledge. By presenting this Newsletter we wish to provide you the same. The Department of Information Science & Engineering is composed of an Undergraduate program in Information Science & Engineering with an intake of 120. Our placement and result records are very impressive. The high quality research work being pursued by the faculty and students is very evident from the large number of research papers being published in referred journals. I thank all the students and faculties for their contribution.



About the Department



The Department of Information Science & Engineering (ISE) is a center of excellence providing in-depth technical knowledge and imparting grassroots thinking in the field of Information Technology. The department constantly thrives to nourish the true spirit & wisdom of Information Technology, into the young aspirants. The department with its cohesive team of faculty members, offers a sound program at the UG and aims to output engineers of innovative technology.

Guest Lectures



Prof. A.M. Padma Reddy

Prof. A.M. Padma Reddy is a renowned professor in engineering institutions with an experience of more than 25 years. He has also worked as Project Manager in Admya Technocrats Pvt.Ltd. Professor possesses a unique distinction of having worked in various capacities such as Project Manager, Consultant, Release Manager in software

industry, as well as teacher, course designer, material producer and committed researcher both at under-graduate and post-graduate levels in various departments and allied areas. With the vast experience at the credit of prof. Padma Reddy the text books authored by him have been very well received by teachers and student community all over the country.

Date: 21/10/2015

Event: Lecture on “Regular expressions in Finite Automata & Formal Languages”

Audience: V semester students of Information Science and Engineering.

Content of the event : Automata Theory and Computability
Finite State Machine (FSM).
Context-Free Grammar (CFG)
Pushdown Automata.
Turing Machine.

Conclusion: Students gained knowledge on the concepts of Automata Theory and Computability.

Date: 21/10/2015

Event: Lecture on “Linked List in Data Structures & applications”

Audience: III semester students of Information Science and Engineering.

Content of the event: Linked lists in Data structures and applications.

Conclusion: Students gained knowledge on the concepts of Linked lists in Data structures and applications.

Guest Lectures



Dr. Guru Prasad, Professor

Dr. H S Guru Prasad is a renowned professor in engineering institutions with an experience of more than 25 years. He is awarded with Rastriya Gaurav Award – 2012. He is actively involved with many professional colleges as BoS member, BoE member etc. He has delivered Guest lectures at many institutions. He has guided over 100 projects.

Date: 22/10/2015

Event: Lecture on “BASICS OF C++”

VTU Rank Holder



Dimpy Joshi

1VI10IS016 (2010-2014 Batch)

secured 3rd Rank in the 14TH VTU Annual Convocation

Toppers

| 2014-15 | | USN | NAME | %AGE | RANK |
|---------|----------|------------|-----------------------|-------|------|
| Even | II Sem | 1VI14IS095 | Swetha C.J | 86.71 | 15 |
| | IV Sem | 1VI13IS051 | Neha Jha | 82.44 | 8 |
| | VI Sem | 1VI12IS088 | Yamuna M | 81.78 | 5 |
| | VIII Sem | 1VI11IS074 | Syeda Taheera Fathima | 85.73 | 19 |
| Odd | V Sem | 1VI12IS088 | Yamuna M | 80.56 | 1 |

Faculty paper publications

| Sl. No | Faculty Name | Publication Title | Title of Conference/ Journal | Month & Year | Vol/ Issue | ISSN/ ISBN |
|--------|-----------------|---|------------------------------|--------------|-------------------------|------------|
| 1. | Mr.Rajanna | Energy Efficient Routing Protocol for Multi Sink Wireless Sensor Networks | IJERECE | MAY 2015 | Vol. 5, Special | 2240-1349 |
| 2. | Gauri.S. Rapate | Comprehensive Survey on Big Data Issues & Alternative measures on Hadoop Map Reduce | IJETAE | MAY 2015 | Vol. 5, Special Issue 2 | 2250-2459 |
| 3. | Rekha M | Preservation of Integrity & Security in Range Queries and Providing Security Using Digital Signature in WSN's | IJIRCCE | MAY 2015 | Vol.3, Special Issue 5, | 2320-9801 |

FDP attended by faculties

1. Rajanna M and Sridevi K N has attended a 3 days FDP on Quality Initiatives in Technical and Higher Educational Institution through Accreditation and Assessment from 16th to 18th Dec 2015 at Vemana IT, Bengaluru.
2. IBM conducted a 3 day workshop on Faculty development program which trained the faculties with modern teaching techniques two faculties from each department attended the program Ms. Rekha M and Mr. Satyanarayana N were chosen from our department to attend this program.

Technical Articles

The sneaker technology designed for people with disabilities

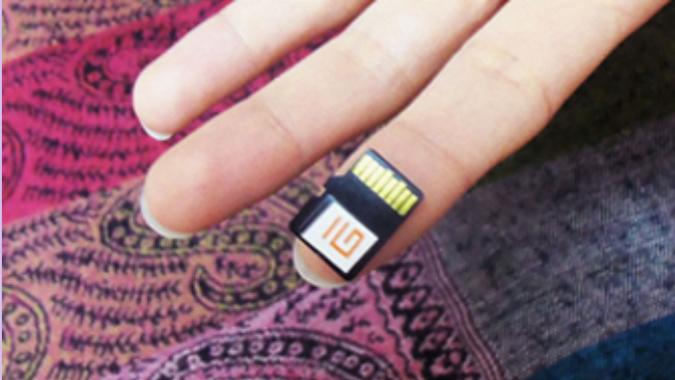


In 2012, Matthew Walzer, who has cerebral palsy, wrote a letter to Nike asking the company to create sneakers that people with disabilities could easily put on and take off without the help of others. This year, the company announced a new line of footwear — Flyease — that has a zipper extending around the back

of the shoe. Instead of laces, which are incredibly difficult for people with movement disorders, stroke victims and amputees, the zipper allows you to "peel" it open with one hand and slide your foot in easily. Nike's senior director of athlete innovation, Tobie Hatfield, designed the technology and worked with Walzer to develop and test the sneakers.

Technical Articles

The "Internet on a microchip"



The WiderNet Project, based at the University of North Carolina, Chapel Hill, developed the eGranary Pocket Library — a microchip that taps into the power of smartphones, laptops and tablets to deliver offline information and educational resources to billions of people

without access to the Internet. WiderNet has connected with with ministries of education, ministries of health and schools of information science in various countries, & aims to fill each "library on a chip" with a few thousand documents that a given institution, such as a medical school in Zambia, identifies as its core material. The project reached its crowdfunding goal in May, and is collaborating with librarians, educators and volunteers around the world to pinpoint the information needed most.

A temporary tattoo that helps diabetics track blood sugar



Patients with diabetes currently need to check their blood sugar multiple times per day with a painful finger prick. But nano engineers at UC San Diego developed a temporary tattoo that non-invasively extracts and measures glucose levels in the fluid between skin cells. The tattoo

doesn't yet provide the necessary numerical levels, but the engineers say it will eventually have Bluetooth capabilities to garner such readouts. The method could pave the way for more uses of the technology, such as delivering medicines through the skin.

Vision of the Institute

To impart quality technical education and provide sustained excellence in specialized fields of engineering there by moulding the students to become responsible individuals with human values.

Mission of the Institute

To provide the students with a good professional platform and train them to successfully fulfill the challenges of corporate world.

Vision of the Department

To transform the programme as a remarkable excellence of Information Technology education hub to produce high quality information technologists.

Mission of the Department

M1: To prepare the state of the art information technologists capable of influencing the society with information technology.

M2: To inculcate the research ambience among budding information technologists to enable them to transform their knowledge into wisdom.

M3: To inculcate information technology principles to percolate the ethics in education and research.