

# NEWS LETTER

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Department of  
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and Engineering

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## VISION

To Create A Vibrant Environment That Fosters Critical Thinking Dynamism, And Innovation to Transform Students Globally Competitive IT Professionals

## MISSION

To Achieve Our Goals Through Distinctive Approach To Curriculum, Technology Driven Research And Rigorous Academic Study Imbided With The Excitement Of Discovery

## What is inside ...?

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ISTE Approved STTP on ALGORITHM DESIGN & COMPLEXITY ANALYSIS

## BEAUTY OF ALGORITHMS

Department of CSE organized an ISTE approved short term training program on "Algorithm Design & Complexity Analysis". The sessions were handled by eminent faculty members from reputed institutes. Ms. Divya B, HoD, CSE welcomed everyone to the 5 day program.



Inauguration.

Our STTP was formally inaugurated by Rev. Fr. George Asarikunnel, Bursar, VJEC. Rev. Fr. George mentioned the importance of such faculty development programs during his inaugural speech. Mr. Prasanthkumar P V, AP, CSE delivered the vote of thanks. Faculty members from CSE, VJEC and GCE, Wayanad attended the STTP program.

### Day 1: Network Flow Algorithms

Dr. Sudeep K S, Assistant Professor, Dept. of CSE, NIT-Calicut is a post doctoral fellow from Chennai Mathematical Institute and had got his PhD from IIT Mumbai. He gave the participants a really informative session on "Network Flow Algorithms". He had started from the basics of algorithms and had taken the participants into the theoretical concepts behind network flow problems. They are central problems in Operations Research, Computer Science and engineering and arise in many real world applications.



A Token of Love to Mr. Sudeep KS

## Day 2: Public Key Cryptographic Algorithms

Day 2 sessions were handled by Dr. Vinod Pathari, Associate Professor, NIT-Calicut. He is a doctorate from IIT Mumbai. He gave us a really informative session on public key or asymmetric cryptography from an algorithm viewpoint. Public key approaches are a class of cryptographic protocols based on algorithms that require two separate keys, one of which is *secret* (or *private*) and one of which is *public*. Although different, the two parts of this key pair are mathematically linked. Dr. Vinod had made the session interactive and interesting with his superior teaching style.



From Dr. Vinod Pathari 's Session

## Day 3: Algorithm Analysis & Design Technique

Dr. Najeeb K, Professor, Govt. College of Engg., Kannur had handled the session on 27/4/15. He is a doctorate from IIT Madras. He had given a wonderful session beginning from the basics of Algorithm design. The participants were given a new outlook to Algorithms using Python scripting. We were made to realize that core concepts can be taken in an interesting manner by using Python and it would make students understand the concepts of time and space complexity.

Day 4:

### Complexity Theory

Day 4 sessions were also handled by Dr. Najeeb K. He gave us an insight into different complexity classes

Day 5 FN:

### Randomized Algorithms

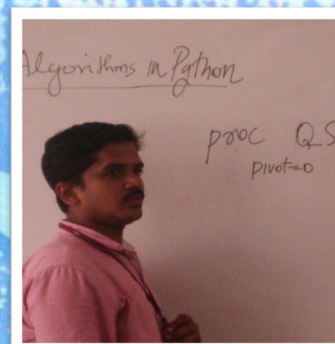
Mr. Prasanthkumar PV, AP, CSE, VJEC handled a session on Randomization Algorithms. This is a new design for finding the solution to Computer Science problems. The behavior of the algorithm is purely based on input and random number generator. Different complexity classes were explored using randomized algorithms.



Dr. Najeeb's Class

## Day 5 AN: Hands-on session with Python

A session on Python programming language was given by Mr. Midhun TP, AP, CSE. Python is a suitable language for implementing Al-



gorithms and it supports almost all type of data structures. Its syntax allows programmers to express concepts in fewer lines of code than would be possible in languages such as C++ or Java. So, this was an interesting session for the participants as we were made to implement sorting and graph algorithms using Python.

## INDUSTRIAL VISIT – CYCORE IT ACADEMY

It was a great pleasure for the students of S4 bile operating systems like Android, Apple iOS, CSE when they got permission for one day industrial visit at CYCORE IT computer academy, Kannur. The students were given a session on a new technology called **PhoneGap** by a senior software engineer of the academy. This is a mobile development framework created by Nitobi. Adobe Systems purchased Nitobi in 2011.

This framework is supported in a number of mobile apps using standardized web APIs.

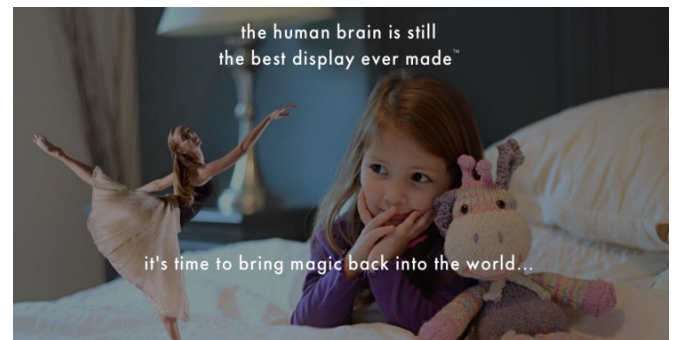
## A New Level in Augmented Reality: Magic Leap



Virtual- and augmented-reality technologies used in movies, smartphone apps, and gadgets tend to under deliver on overhyped promises with images that does not look real. Typically that's because stereoscopic 3-D, the most commonly used method, is essentially tricking your eyes instead of working with the way you normally see things. It produces a sense of depth by showing each eye a separate image of the same object at a different angle. But since that forces



you to look simultaneously at a flat screen in the distance and images that appear to be moving in front of you, it can make you dizzy and lead to headache and nausea. Magic Leap introduces a new approach. They describe displays that can create the same kind of 3-D patterns of light rays, known as



“light fields,” that our eyes take in from the real objects around us. Magic Leap researchers have shown that this allows your eyes to focus on the depths of an artificial 3-D scene just as they would in the real world—providing a far more realistic illusion of virtual objects merged with the real world. It tries to seamlessly blend computer-generated graphics with the real world. With this we can expect a world where you can talk to a person as he/she is near to you or you can enjoy movies/games like you are inside in it...

# Staff Achievements

## PAPER PUBLICATIONS

Ms. Deroll David, Ms. Divya B, “Image Authentication Techniques & Advances Survey”, Compusoft An International Journal of Advanced Computer Technology, April 2015. ISSN: 2320-0790

Ms. Divya B, Mrs. Ancy K Sunny, Mrs. Vidhya S S, “A study on video streaming over MANET”, International Journal of Engineering Technology Science & Research, March 2015. ISSN: 2394-3386

Mrs. Ancy K Sunny, Mrs. Vidhya S S, Ms. Divya B, “A survey on visual cryptography”, International Journal of Engineering Technology Management and Applied Sciences, March 2015. ISSN: 2349-4476

Mrs. Neena V V, Ms. Divya B, Mr. Jilson P Jose, “A Review on Node Cooperation in Multihop Wireless Networks”, International Journal of Engineering Technology Management and Applied Sciences, March 2015. ISSN: 2349-4476

Mrs. Vidhya S S, Mrs. Neena V V, Mrs. Ancy K Sunny, “A study on preserving location privacy”, International Journal of Engineering Technology Science & Research, March 2015. ISSN: 2394-3386

Mr. Jilson P Jose, Mr. Rahul Ajithkumar, Mrs. Neena V V, “A Comparison Study on IDS for Addressing Security Issues of MANETs”, International Journal of Innovations and Advancement in Computer Science (IJACS), March 2015. ISSN 2347 – 8616

### **News Letter Team:**

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