



# MANAKULA VINAYAGAR

## INSTITUTE OF TECHNOLOGY

Kalitheerthal kuppam, Puducherry – 605 107

### DEPARTMENT OF INFORMATION TECHNOLOGY



## IT-Xtra in addition... MAGAZINE 2016-2017 Volume 5

#### VISION OF THE DEPARTMENT

To transform the individuals into globally proficient Information Technologists, to meet the challenges of the evolving society.

#### MISSION OF THE DEPARTMENT

- M1: **Higher Order Thinking**: To provide quality education in both theoretical and practical aspects in the field of Information Technology.
- M2: **Competency**: To equip the students to cater the industrial demands through providing advance training.
- M3: **Continuous Learning**: To encourage and guide the students to participate in research oriented activities and pursue higher education.
- M4: **Entrepreneurship**: To inculcate the spirit of entrepreneurship among students to serve the nation.



★ Educate

★ Empower

★ Excel



# MANAKULA VINAYAGAR

## INSTITUTE OF TECHNOLOGY

Kalitheerthal kuppam, Puducherry – 605 107

### VISION OF THE INSTITUTION

To accomplish excellence in the field of technical education and scientific research on regional, national and international levels through committing to total quality for its faculty, providing excellent infrastructure, research facilities and conducive atmosphere that would motivate the students in the pursuit of knowledge in Engineering and Technology.

### MISSION OF THE INSTITUTION

- ◆ To provide in depth knowledge in fundamentals to students to improve their learning and analytical skills.
- ◆ To provide our students with the most progressive, relevant and well rounded academic programs, supporting their learning through advanced and extensive resources.
- ◆ To promote interaction with industries and other institutes of higher learning to equip our students to face the challenges on real time problems.
- ◆ To develop the overall personality of the students to mould them into a good citizen with integrity and morality.



# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

kalitheerthal Kuppam, Madagadipet, Puducherry - 605107

## DEPARTMENT OF INFORMATION TECHNOLOGY

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### Program Educational Objectives (PEOs)

- PEO1: Employability:** Graduates apply the knowledge of computations, engineering and technology to pursue a good career in the Information Technology.
- PEO2: Higher Education:** Graduates will participate in life - long learning through the successful completion of advanced degrees, continuing education and other professional developments.
- PEO3: Entrepreneurship:** Graduates will have the ability to exhibit their leadership quality and enable them to become an entrepreneur.
- PEO4: Ethics:** Graduates cultivate professional and ethical attitudes with effective communication skills, team work and multi - disciplinary approach related to engineering issues.



# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthal Kuppam, Madagadipet, Puducherry - 605107

## DEPARTMENT OF INFORMATION TECHNOLOGY

### Program Outcomes (POs)

- PO1: Engineering knowledge:** Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2: Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4: Conduct investigations of complex problems:** Use research - based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- PO6: The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a Member and leader in a team, to manage projects and in multidisciplinary environments
- PO12: Life - long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### Program Specific Outcomes (PSOs)

- PSO1: Products Development:** Ability to apply mathematical methodologies to solve computation task, Model real world problem using appropriate data structure and suitable algorithm.
- PSO2: Design Thinking:** Ability to use knowledge in various domains to identify research gaps and solve complex problems, using latest hardware and software tools, along with analytical skills to arrive cost effective and appropriate solutions.

# WORKSHOPS

**One day Internal workshop on “Arduino Based Application Development” by Mr. K. Premkumar AP/IT with G. Karthick, Branch manager, Kalvi Institute, Puducherry, on 5th August 2016.**



**Workshop on” Testing of electronic devices” conducted by Mr. Raja on 20<sup>th</sup> September 2016.**



# WORKSHOPS

**Workshop on “MS office Automation” handled by our faculty Dr.P.Sivakumar, Mr. S.Uthayashangar on 21st September 2016.**



**One Day Workshop on “MEAN Stack Development Program” handled by Mr. Khuzema on 10<sup>th</sup> September 2016.**



# WORKSHOPS

**One Day Workshop on “Creating real time software Professionals” handled by Mr. Bhaskar Krishnamorthy Founder & CEO Cavintek Software Pvt Ltd on 8<sup>th</sup> October 2016**

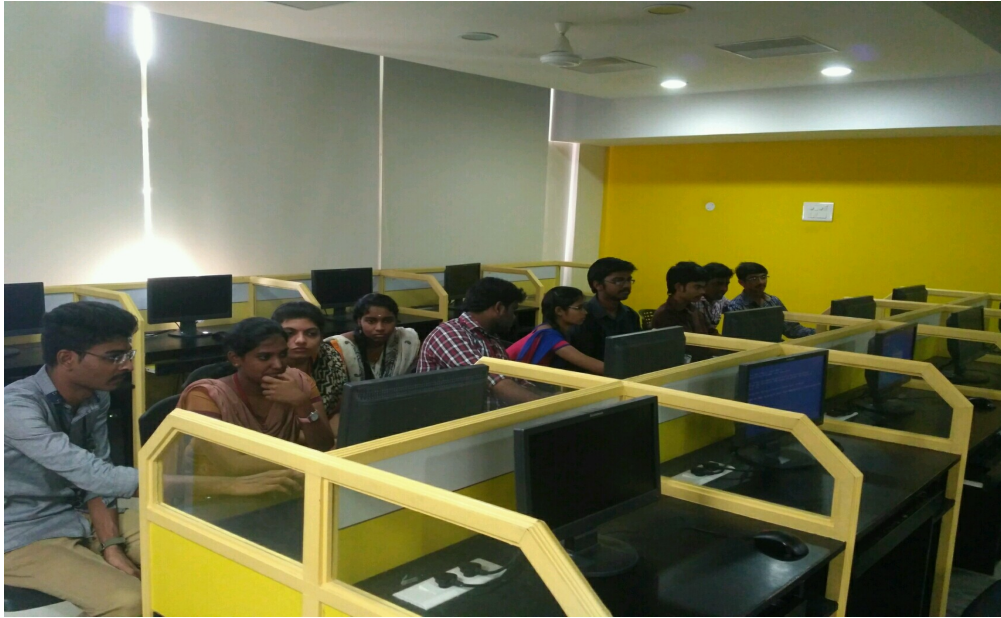


**Skill development programme on” Laser printer trouble shooting and Refilling” Conducted by Mr. Raja on 22<sup>nd</sup> September 2016.**



# WORKSHOPS

**One Day Online Webinar on “Smart India Hackathon 2017” on 4<sup>th</sup> January 2017.**



**One Day workshop on “Cashless Transactions and Security Issues in Net Banking”  
handled by Ms.Jayabharathi on 20<sup>th</sup> January 2017.**





# WORKSHOPS

## **One Day Android Application Development, Organized by SHAM Computing on 4<sup>th</sup> March 2017.**



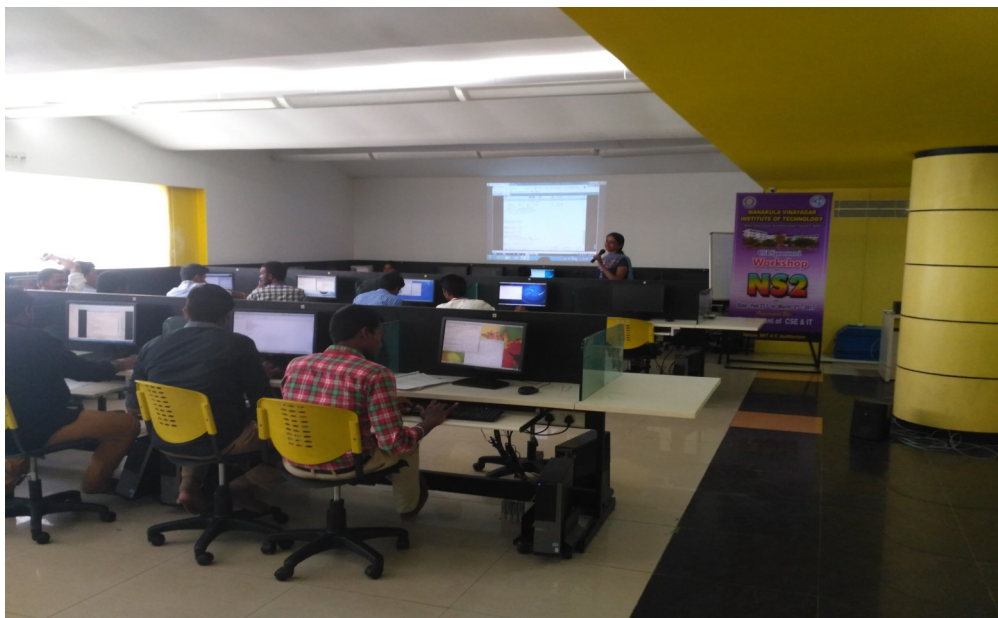
One day Workshop on “Mobile Application Development” was conducted by IT department on 4<sup>th</sup> March 2017. The session was handled by Mr. Mohan, Trainer, Shyam Info Tech.

# WORKSHOPS

**One Day Workshop on “UML Diagram” by Mr.Purushothaman on 24<sup>th</sup> February 2017.**



**One day workshop on Open Source Simulator – NS2, Handled by Ms. Anjali, SAT Infosys, Coimbatore on 27<sup>th</sup>-28<sup>th</sup> February 2017**



# VALUE ADDED COURSES

**Three Days training Program on ICTACT- Big Data analytics, handled by Mr. Hari Prasath on 02.02.17 to 04.02.17**



**Three Days Training Program on Cloud Computing, handled by Mr. Karthi on 02.02.17 to 04.02.17**



# GUEST LECTURES

**Guest Lecture On “Context Free Language and Pushdown Automata” handled by Dr.S.Lakshmanapandian on 23<sup>rd</sup> August 2016.**



**Guest Lecture on “Web and Graphics Design” by Mr.RajMohan on 8<sup>th</sup> July 2016.**



# GUEST LECTURES

**Guest lecture on “Communication Skill Development” by Mr. Datchanamoorthy on 9<sup>th</sup> July 2016.**



**Guest lecture on “Ethical Hacking” handled by Mr.Sriram on 13<sup>th</sup> July 2016.**



# GUEST LECTURES

**Guest Lecture on “Keep IT up” by Dr. Sairam Sundaram on 23rd July 2016.**



**Skill development programme on” Laser printer trouble shooting and Refilling”  
Conducted by Mr. Raja on 22<sup>nd</sup> September 2016.**



# SEMINAR

**Seminar on “Importance of Communication in Career Development” by Mr. Bennet Jay Ragland on 20<sup>th</sup> July 2016.**

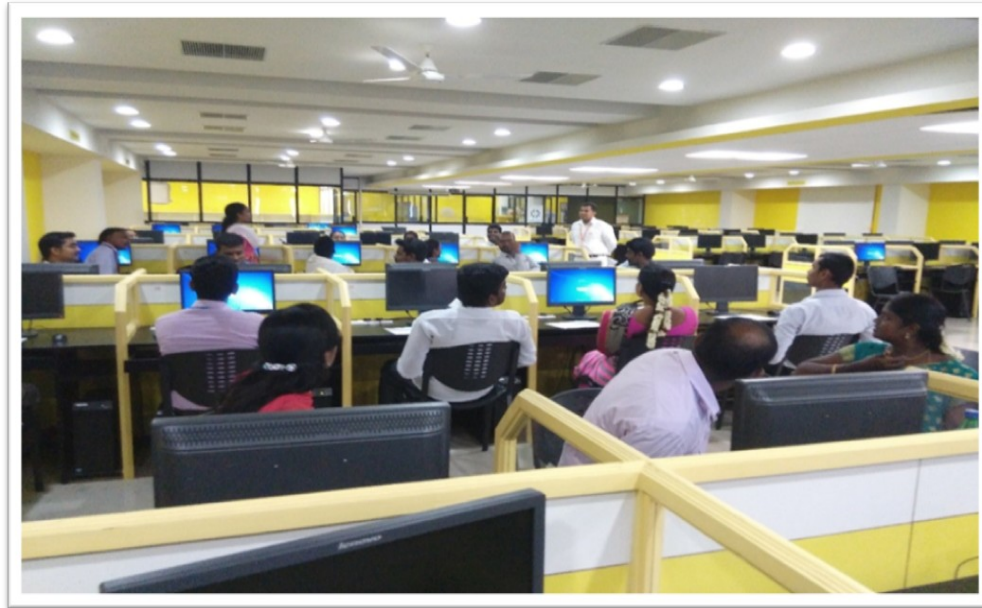


**Seminar on “Awareness program on Big Data” by Ms. Priya on 21<sup>th</sup> July 2016.**

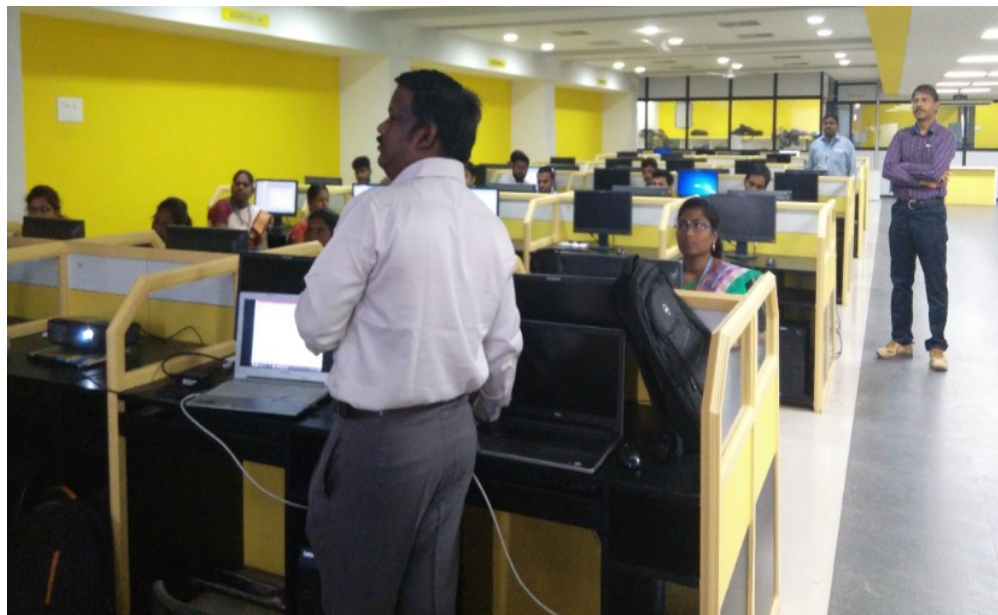


# FACULTY DEVELOPMENT PROGRAMME

**ICTACT Sponsored two days FDP on “Mobile Application Development” handled by Mr. Shanmugavel, from 29<sup>th</sup> June 2016 and 30<sup>th</sup> June 2016.**



**Three days FDP on “Programming in PHP” handled by Mr.Sankar, SMVSS from 15<sup>th</sup> June to 17<sup>th</sup> June 2016.**





## CONTESTS ORGANIZED

### **One day Arduino Project Contest Organized by Smart Association of Information Technology (SAIT) on 26<sup>th</sup> August 2016**



Our Principal Dr. S. Malarkkan addressed the valedictory. Mr. Ganamani, Manager-HR, 4th dimension Technologies Chennai, has kindly consented to be the chief guest of valedictory function.



## CONTESTS ORGANIZED

Our judges Mr.Arunmozhi, HOD/ECE and Ms.Valli, HOD/EEE has evaluated the projects of each students



**Independence Day Celebration Contest 2016 (ICC 16)**  
**Organized by Smart Association of Information Technology (SAIT) on 6<sup>th</sup> August 2016**



# Alumini Contribution

On 27<sup>th</sup> August 2016, Our alumni, Mr.Aurobind interacted with our third year budding engineers about the various points of view on their career, preparation for placements, leadership skills, and the expectation of the corporate from the fresher.



On 27<sup>th</sup> August 2016, our alumni, Ms.Dhanasuriya interacted with our final year students and discussed about doing academic projects in an effective manner and steps for career developments



# NATIONAL LEVEL TECHNICAL SYMPOSIUM

**A National Level Technical Festival held on 10<sup>th</sup> - 11<sup>th</sup> February 2017**



The Inaugural address by Mr. Vinodkumar Gopinath, Director –Technology, Novatium Solutions Pvt. Ltd, Chennai



# NATIONAL LEVEL CONFERENCE –SCAN-2017

**National conference on Systems, Computations, Automations and Networking (SCAN '17)**

**In association with ICTACT and CSI Chapter, Pondicherry on 10<sup>th</sup> March 2017**



**International Conference on Advances in Emerging Technology in association with International Journal of Emerging Technology in computer science and Electronics (IJETCSE) India on 1st April 2017.**



# 25th Edition of Bridge Conference

## Bridge 2017



Dr.P.Sivakumar, HOD/IT has attended the 25th Edition of Bridge Conference, largest Industry Institute Interaction Event of India for Academicians, Industry Experts and Policy Makers, Organized by ICT Academy, Chennai at ITC Grand Chola on 1st March 2017.

# INDUSTRIAL VISIT

## INDUSTRIAL VISIT



**Second Year IT - Industrial Visit to Dell Company Pvt. Ltd. Chennai on 4<sup>th</sup> February 2017** The recent Industrial Visit to 'Dell Company Pvt.Ltd.' located at OMR Kandachavady, Chennai,' by 2nd year B.Tech, IT students, on 4th February, 2017, who were accompanied by two of the faculties of the department, Mr.K.Vijayakumar and Ms.Thebina.



# HACKATHON 2017

Our Department IV year IT student of V.Dharanidharan, M.Tamizhamala and II year IT Student of S.Sowmiya, V.Pritheba, S.Rajeswari, B.Lavanya has registered in Project Contest - Smart India Hackathon 2017 in the title “Information for the First Mile or acceptance point” by Department of Posts, Ministry of Communications on 19th January 2017. They **got selected for Final Round**, which is announced on 6<sup>th</sup> March 2017 and Event going to be held on 1<sup>st</sup>-2<sup>nd</sup> April 2017.

This team was guided by Mr.K.Vijiyakumar and Mr.P.Mathivanan.





# STUDENTS IN PLANT TRAINING

**In-Plant Training programme undergone at Nextgen IT Solutions, Puducherry from 14<sup>th</sup> august to 21<sup>st</sup> August 2016.**



## Extra Curricular Activities



## CO-CURRICULAR ACTIVITY

### PRIZE WINNER IN ARDUINO PROJECT CONTEST



Our Department II year students, Jayaraj.R have participated and got the consilium prize in Arduino Project Contest 2016 on the topic “Smart Home” organized by IT Dept at MIT, Puducherry on 26th August 2016



## CO-CURRICULAR ACTIVITY

Our Department III year students, Rajeshkumar, Umashangar and Thinesh kumar have participated in Arduino Project Contest 2016, on the topic “Alaram using PIR Sensor” ” organized by ECE Dept at MIT, Puducherry on 20<sup>th</sup> September 2016.



## CO-CURRICULAR ACTIVITY

### **Paper Presentation Entitled on “Data Analytics and Security” on 3rd February 2017**

**Our Department III year IT students, B.Bhuvanalakshmi and G.Durga Devi have participated and won the Second prize, cash award of Rs.750 in Paper Presentation**



### **Web Designing Event Participation at Krishnasamy college of Engineering & Technology on 3rd February 2017**



## CO-CURRICULAR ACTIVITY

### Web Designing Event Participation at Krishnasamy college of Engineering & Technology on 3rd February 2017



### SMVEC Rolling Trophy 2017 Contest at SMVEC on 10<sup>th</sup> February 2017.



## CO-CURRICULAR ACTIVITY

### Project Implementation on “SMART HOMES” on 4.2.2017



### Visited IISc, Bangalore for registration for Funding Project on Smart Home Automation Device



# EXTRA CURRICULAR ACTIVITIES

**Winners of 15th SR Champions Trophy—2017 held at SR Engineering College, Warangal, Telangana during 3rd January to 11th January 2017**



**R.Jayaraj, Winner at Weightlifting Conducted by Puducherry Wight lifting association on 7<sup>th</sup> January 2017**



# EXTRA CURRICULAR ACTIVITIES

## Inter Collegiate Tournament for chess, Conducted by Pondicherry University Directorate of Physical Education & Sports



சதுரங்க போட்டிகள்:

### புதுவை என்ஜினியரிங் கல்லூரி அணி முதல் இடம்

புதுச்சேரி, பிப்.21- பல்கலைக்கழக இணைப்பு கல்லூரிகளுக்கு இடையேயான ஆண்கள், மகளிர் சதுரங்க போட்டிகள் (செஸ்) துவங்குப்பம் ராஜீவ்காந்தி அரசு கலைக்கல்லூரி வளாகத்தில் நடந்தது. இந்த போட்டிகளில் ஆண்கள் பிரிவில் 12 கல்லூரி அணிகளும், பெண்கள் பிரிவில் 10 கல்லூரிகளும் கலந்துகொண்டன.

போட்டிகளில் ஆண்கள் பிரிவில் புதுவை என்ஜினியரிங் கல்லூரி அணி முதல் இடத்தையும், புதுவை பல்கலைக்கழக அணி 2-வது இடத்தையும், சாரதா கங்காதரன் கல்லூரி அணி 3-வது

இடத்தையும் பிடித்தன. மகளிர் பிரிவில் மணக்குள விநாயகர் என்ஜினியரிங் கல்லூரி அணி முதல் இடத்தையும், பாரதிதாசன் மகளிர் கல்லூரி அணி 2-வது இடத்தையும், 3-வது இடத்தை மணக்குள விநாயகர் இன்ஸ்டிடியூட் ஆப்டெக்னாலஜி அணியும் பிடித்தன.

தனிப்பிரிவு போட்டிகளில் (ஆண்கள்) புதுவை என்ஜினியரிங் கல்லூரி மாணவர் தினேஷ் முதல் இடத்தையும், மணக்குள விநாயகர் கல்லூரி மாணவர் பர்கான் 2-வது இடத்தையும், புதுவை என்ஜினியரிங் கல்லூரி மாணவர் கரேஷ்கிருஷ்ணா 3-வது இடத்தையும் பிடித்தனர். மகளிர் பிரிவில் சாரதா கங்காதரன் கல்லூரி மாணவி

கலைவாணி முதல் இடத்தையும், பாரதிதாசன் கல்லூரி மாணவி சங்கீதா 2-வது இடத்தையும், போப்பஜான்பால் கல்வியியல் கல்லூரி மாணவி மேரி மங்கையர்க்கரசி 3-வது இடத்தையும் பிடித்தனர்.

அதைத்தொடர்ந்து நடந்த பரிசளிப்பு விழாவுக்கு கல்லூரி முதல்வர் ராதாகிருஷ்ணன் தலைமை தாங்கினார். முதல்-அமைச்சரின் உதவி தனிச்செயலாளர் பாலாஜி சிறப்பு விருந்தினராக கலந்து கொண்டார். புதுவை என்ஜினியரிங் கல்லூரி விளையாட்டு இயக்குனர் ரமேசு, புதுவை பல்கலைக்கழக உதவி விளையாட்டு இயக்குனர் சிவராமன் ஆகியோர் வெற்றி பெற்றவர்களுக்கு பதக்கம் மற்றும் சான்றிதழ்களை வழங்கினார்கள். நிகழ்ச்சியில் கல்லூரி விளையாட்டு இயக்குனர்கள் ஜேம்ஸ், குரியமுர்த்தி, ராஜா ராமன், சிவராஜன் உள்பட பலர் கலந்து கொண்டனர்.

## Women's Day Celebration 2017 on 8<sup>th</sup> March 2017

Our Department III year IT student, K. Arun has participated and **Won Second Trophy** in the Kavithai Competition, topic of Voice of Women under Women's Day Celebration organized at MIT on 8<sup>th</sup> March 2017.





# EXTRA CURRICULAR ACTIVITIES

**An Industry Interface Inter-Collegiate students Meet, organized by Department of Banking Technology school of Management, Pondicherry University on 10<sup>th</sup> March 2017**



**Our Department III year IT student, A.Sivapridha, S.Kirubakaran have participated and got First Place , cash award of Rs.150 with Trophy**

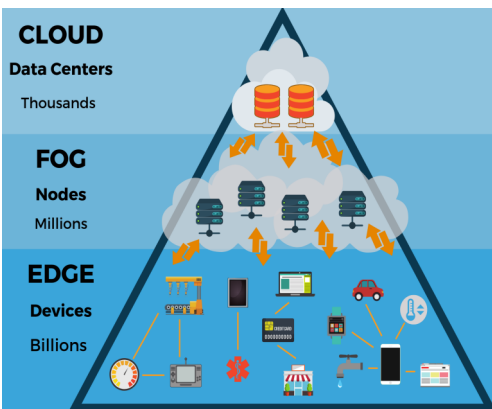


## EDGE COMPUTING

**Cloud Computing** is the use of hardware and software to deliver a service over a network (typically the Internet). With **cloud computing**, users can access files and use applications from any device that can access the Internet. An example of a **Cloud Computing provider** is Google's Gmail.

### Edge computing and distributed cloud

Edge computing provides compute and storage resources with adequate connectivity (networking) close to the devices generating traffic. The benefit is the ability to provide new services with high requirements on e.g. latency or on local break-out possibilities to save bandwidth in the network – data should not have to travel far in the network to reach the server. Regulatory compliance and network scalability are also important edge computing drivers.



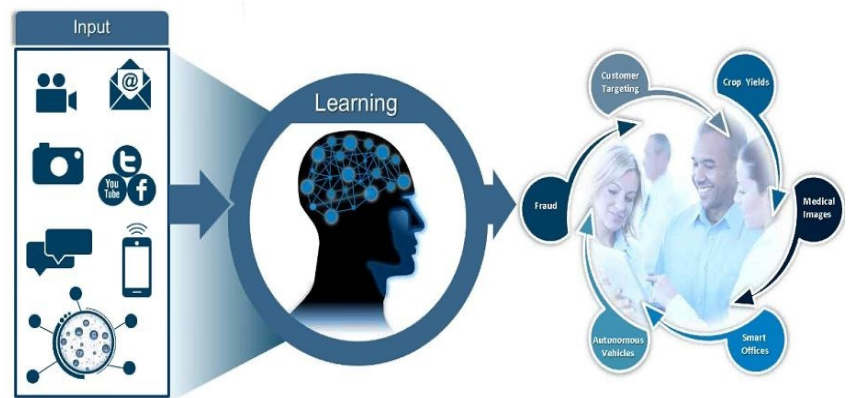
Many use-cases for IoT and 5G span the device, access-, distributed-, national- and global sites. For example, an augmented reality solution comprises a client on a device, a component supporting video processing, a CDN/caching function at a distributed site and a backend at a national- or global site. This requires a solution that can handle any workload, anywhere in the network, with end to end orchestration.

Ramya.A III yr—IT

## COGNITIVE COMPUTING

At present, there is no widely agreed upon definition for cognitive computing in either academia or industry.

In general, the term cognitive computing has been used to refer to new hardware and/or software that mimics the functioning of the human brain (2004) and helps to improve human decision-making. In this sense, CC is a new type of computing with the goal of more accurate models of how the human brain/mind senses, reasons, and responds to stimulus. CC applications link data analysis and adaptive page displays (AUI) to adjust content for a particular type of audience. As such, CC hardware and applications strive to be more affective and more influential by design.



A.Sakthivel II Yr IT

## FLUTTER

Flutter is Google's UI toolkit for building beautiful, natively compiled applications for mobile, web, and desktop from a single codebase.

### Fast Development

Paint your app to life in milliseconds with Stateful Hot Reload. Use a rich set of fully-customizable widgets to build native interfaces in minutes.

### Expressive and Flexible UI

Quickly ship features with a focus on native end-user experiences. Layered architecture allows for full customization, which results in incredibly fast rendering and expressive and flexible designs.

### Native Performance

Flutter's widgets incorporate all critical platform differences such as scrolling, navigation, icons and fonts, and your Flutter code is compiled to native ARM machine code using Dart's native compilers. Thus Flutter gives you full native performance on both iOS and Android.



Mobile

Web

Desktop

Embedded

Vaḍivelan.K IV Yr IT

# STUDENTS CORNER



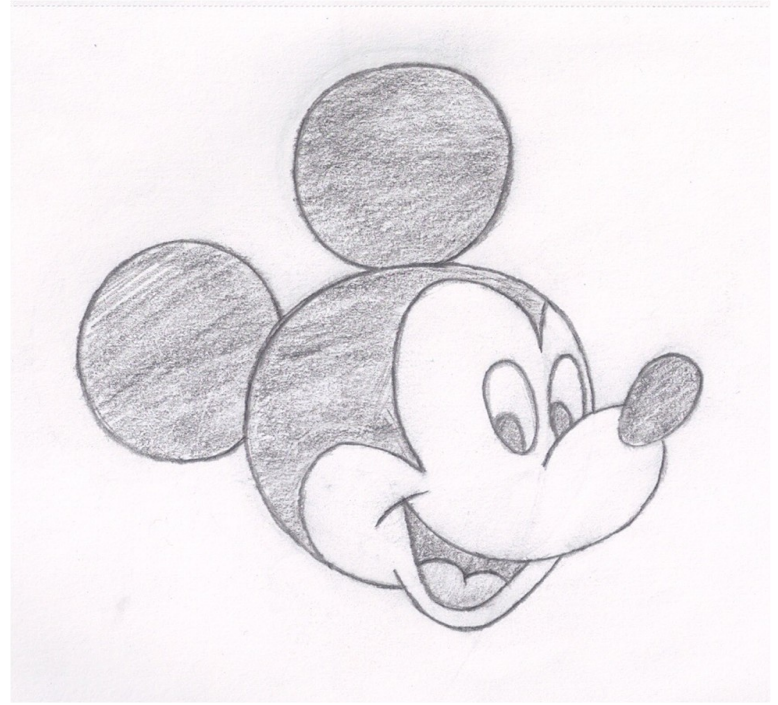
Dharanidharan.V IV Yr IT



Thilagavathy.S III Yr IT



Pavithra.G III Yr- IT



Logavignesh- II Yr IT



Dhamini.T  
IIyr-IT



# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthal Kuppam, Pondicherry – 605107

DEPARTMENT OF INFORMATION TECHNOLOGY

## PLACED STUDENTS DETAILS (2013-2017)





ARUNA. R      SARVODAYA.K




SUWATHY.S







DHARANI DHARAN.V      KEERTHIGA.K      SANGEETHA.N      TAMIZH AMALA.M







BHAVANI.G      DIVYA BHARATHI.S      GAYATHRI.G      MONICA.M





SIVACHAKRAVARTHY.G      SUBASH.S      VALLI.T










HEMALATHA.B      ILANCHEZIYAN.D      MANIKANDAN.R      THARANIGA.R      RAJEEVI.R







VADIVELAN.K      VINITHA.V      BUVANESWARIA      HEMALATHA.T      SRIRAM.R

INDUMATHY.R




IYYAPPAN.S





KEERTHANA.M      SHABANA YASMIN.J




THENMOZHI.R




ARUNA. A

# CONGRATULATIONS!



# MANAKULA VINAYAGAR

## INSTITUTE OF TECHNOLOGY

Kalitheerthalluppam, Puducherry – 605 107

### DEPARTMENT OF INFORMATION TECHNOLOGY

**IT-Xtra**  
in addition...

## MAGAZINE

2016-2017

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5. Anbarasan.G
6. Jayasree.R



Thanks.....

★ Educate

★ Empower

★ Excel