

*ALU DCS Plugins* is an E-Magazine. It is published Quarterly by the Department of Computer Science, Science Campus, Alagappa University, Karaikudi, Tamilnadu - 630 003, India.

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### வள்ளல் வாழ்த்து

கோடி கொடுத்த கொடைஞன் குடியிருந்த  
வீடும் கொடுத்த விழுத்தெய்வம் - தேடியும்  
அள்ளிக்கொடுத்த அழகன் அறிவூட்டும்  
வெள்ளி விளக்கே விளக்கு.

முன்பெருந் தவத்தால் தோன்றி  
முயன்றெமைக் காக்கும் வள்ளல்  
அன்பினால் அழகப்பாவின்  
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## ACKNOWLEDGEMENT

First and foremost, we would like to extend our sincere gratitude and thanks to our honorable **Vice-chancellor Prof. S. SUBBIAH**, who is always a source of encouragement in all our endeavors. He is the motivator and initiator behind many innovative practices adopted in our University.

We would like to thank our most respected **Registrar Prof. V. BALACHANDRAN**, for his encouragement and helping hand.

We would like to thank **Prof. M. Selvam, Coordinator-IQAC**, Alagappa University, for his valuable guidelines to shape up this Magazine.

We would like to thank the **Members of Syndicate**, Alagappa University who are associated with all our academic events and offering invaluable suggestions to elevate this new-born department.

We would also like to thank our Professor and Head **Dr. E. Ramaraj**, for always taking efforts in implementing creative ideas from staff as well as students of our Department. This second issue is brought out with his sincere efforts, coordination and support.

The second issue includes academic events, extension activities, student achievements and articles in computer paradigms. Students of our department have written articles enthusiastically and voluntarily.

Our Endeavour with each edition is to ignite the innovative minds and cultivate self-confidence in youth.

Last but not least, we would like to thank all the faculty members, students, alumni and all stake holders for their valuable inputs.

*Dr. T. Meyyappan*

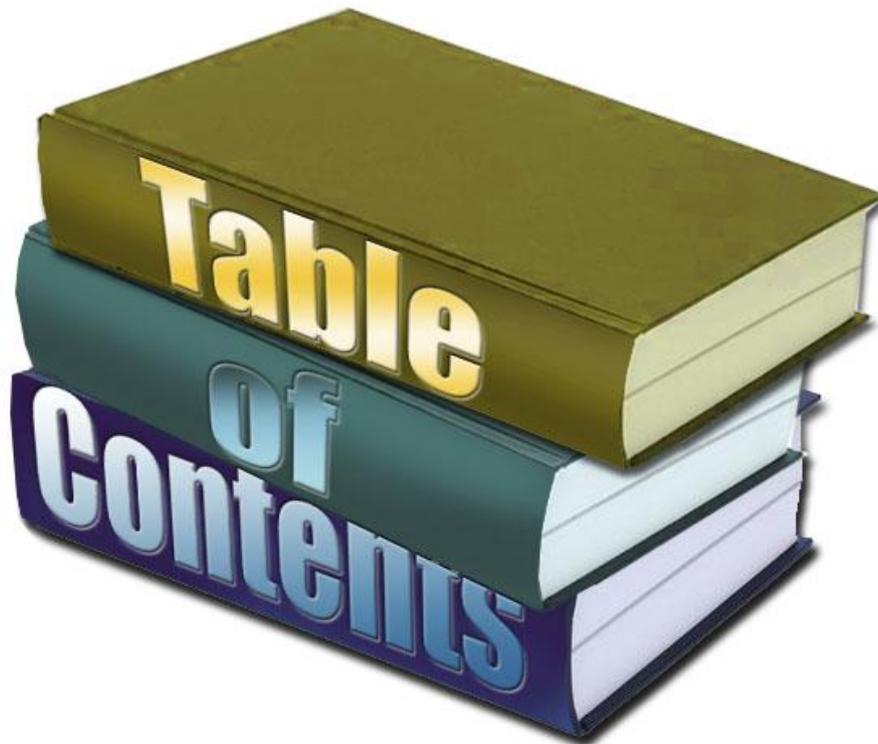
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*&*

*ALU DCS Plug-ins Team*

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**MESSAGE FROM THE EDITOR IN CHIEF**

**Dr. E. RAMARAJ**  
Professor & Head i/c  
Department of Computer Science

The second issue of this magazine is full of exciting articles from students, scholars, staff, alumnis, stakeholders, events in the department, student and faculty achievements. I would like to thank every member of the **ALU DCS Plug-ins** team, without their contribution, this issue would not have been possible. I hope you enjoy reading this magazine as much as I enjoyed working towards its creation and more importantly, I hope that the plug-ins may pave the path for igniting young minds.

This is a self-effacing and continuous attempt from the Department of Computer Science towards articulating its ideas and visualizing possibilities for prospering in the contemporary world. Computers occupied every walks of our life. Great Scientists, Mathematicians, Technicians, and Engineers with their tireless efforts contributed to this e-world in which we live today with sophistication and ease. It is the responsibility of younger generation to contribute more to it.



## ALUMNI MEET – 22<sup>nd</sup> December, 2016

After inception of Department of Computer Science in June 2016, the Second ALUMNI meet is organized on 22<sup>nd</sup> December 2016. ALUMNIs from past academic years and current batch of students, scholars and faculty members have attended. Dr E. Ramaraj, Professor and Head, welcomed the gathering. The chief guest, Prof. H. GurumallesPrabhu, Controller of examinations (i/c), Alagappa University addressed the ALUMNIs and released the first issue of department E-Magazine Plug-ins(Quarterly Issue). In his speech, he listed the developments of the university in the past years and how e-governance is practiced in Examination Section.



*Alagappa University Computer Science ALUMNI Association was born. The following ALUMNIs from various academic years were unanimously elected as office bearers: President - Dr. E. Ramaraj, Prof & Head, Department of Computer Science, Alagappa University. Secretary - Dr. S. S. Dhenakaran, Professor, Department of Computer Science. Treasurer - Thiru. C. Chandrasekaran, Associate Professor and Head, Department of Computer Science, Alagappa Government Arts College, Karaikudi*

ALUMNIs from various walks of life shared their career advancements, lifestyles, experience and achievements with current batch of students and motivated them. ALUMNIs have discussed among them and with office bearers about the contributions to be made in terms of infrastructural facilities and job opportunities for students graduating in future. Alumnis from abroad, who could not participate in the event, interacted with participants through video conferencing.



*Alumnis from abroad made their virtual presence through video conferencing*

All the faculty members, students and office staff members extended their support for the successful conduct of the event.

### **Women Empowerment Cell – 22<sup>nd</sup> December, 2016**

Mrs. Dr. S. Yasodha, Associate Professor, Department of Computer Science, Government Arts College for Women, Pudukkottai and Mrs. Dr. B. Indrani, Assistant Professor, Distance Education, Department of Computer Science, Madurai Kamaraj University, Motivated the students to take part in extra curricular activities and research to mould their future. Female students from I M.Sc, M.Sc and Ph.D. Scholars participated.



*Mrs. Dr. B. Indrani, Asst. Professor, Distance Education, Madurai Kamaraj University addressing the students.*



*Mrs. Dr. S. Yashodha, Asst. Professor, Department of Computer Science, Government Arts College, Pudukkottai addressing the students.*

### International Dhoti Day - January 6, 2017

International Dhoti Day is observed by the department of computer science. ‘Dhoti Day’ was celebrated with all male department employees reporting for duty in the traditional attire.

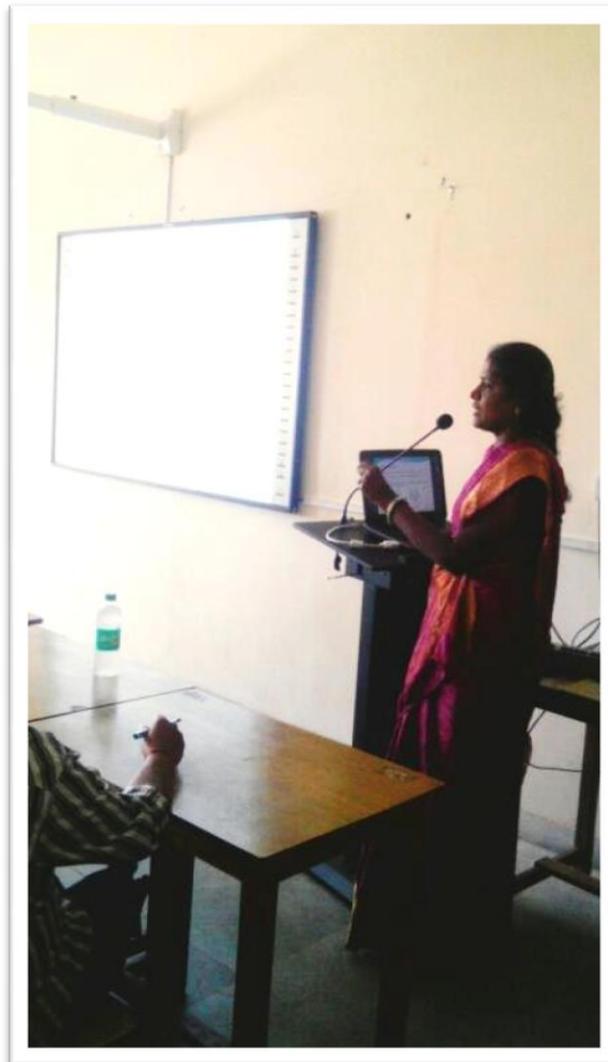
### MakaraSankranti (Pongal) Day Celebrations – January 12, 2017

Pongal Day (தமிழர் திருநாள்) is celebrated as per the directions of state government every year. Dr. E. Ramaraj, Head of the department inaugurated the celebration with lighting of the firewood. Faculty Members administrative staff members and students of department of computer science celebrated traditionally. Rice cooked with jaggery and sugarcane are served to all the participants.



### Ph.D. Public Viva-Voce Examination - January 27, 2017, 11:00 a.m.

Mrs. S. Alagu, Ph.D. Research Scholar defended the public viva-voce examination on her thesis “**Dynamic Channel Allocation and Prioritized Queuing scheme to handle handoff in wireless mobile network**”. The viva-voce board with convener and research supervisor Dr. T. Meyyappan, Dr. E. Ramaraj, Prof. & Head( i/c) and External Examiner Dr. M. Ezhilarasan, Professor, Department of Information Technology, Pondicherry Engineering College, Pondicherry conducted the examination. Faculty members from various disciplines, Research Scholars and M.Sc. Students attended.



**One Student One Tree Programme organized by Swatch Bharath and Swash Bharath Centres – February 10, 2017, 10:00 a.m.**



*Centre for Swatch Bharath, Swash Bharath, NSS Environment Awareness Club and Department of Botany jointly organized the programme. Tree saplings were planted in front of Management Studies Campus by First Year M.Sc. Students of Department of Computer Science.*

**Ph.D. Public Viva-Voce Examination - February 10, 2017, 11:00 a.m.**

Mr. M. Ilayaraja, Ph.D. Research Scholar defended the public viva-voce examination on his thesis “A Novel Mining Methods to identify risk factors frequently causing heart disease to patients through frequent Itemset Generation”. The viva-voce board with convener and research supervisor Dr. T. Meyyappan, Dr. E. Ramaraj, Head (i/c) and External Examiner Dr. D.S. Mahendran, Associate Professor, Department of Computer Science, Adithanar College of Arts & Science, Tiruchendur conducted the examination. Faculty members from various disciplines, Research Scholars and M.Sc. Students attended.

**Research Papers Presented in International Conference - February 15-16, 2017**

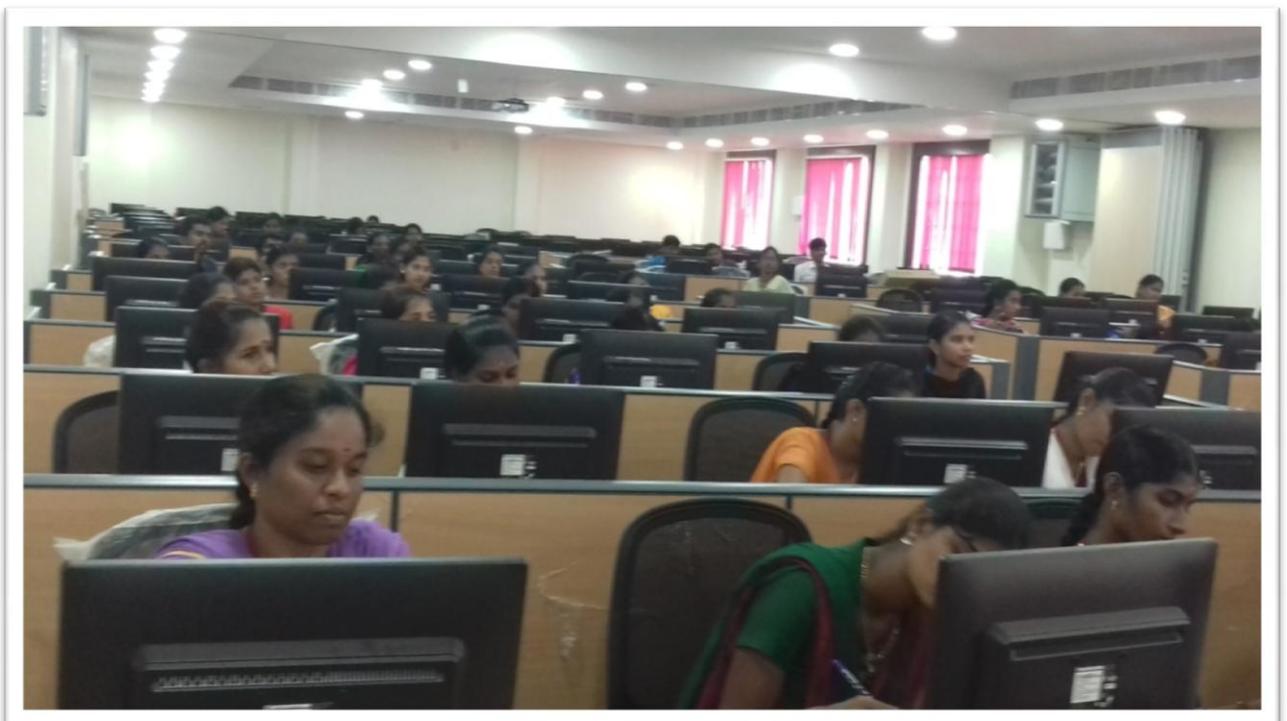
Alagappa Institute of Skill Development and Computer Centre jointly organized an International Conference on “IT Skill Shows & Advancements in Computing Resources” at L.C.T.L. Palaniappa Chettiar Auditorium. Our faculty members, M.Sc. students and Research Scholars have presented their research outcomes. Parallel technical sessions with chairman **Prof. S. R. Subramanya**, School of Engineering & Computing, National University, San Diego, California, USA, **Dr. George**, Associate Professor, Department of Computer Science, Jamal Mohamed College, Trichy, faculty members in computer centre and Department of Computer Science were conducted. M.Sc. students have also demonstrated the software developed by them in IT skills show. The following authors have presented their research papers.

Authors	Paper Title
<b>Dr. N. Gnanasankaran</b> , Teaching Assistant	Applications of COTS Components
<b>J.Mahalakshmi</b> , Ph.D. Scholar and <b>Prof. K. Kuppusamy</b>	A Novel Application on Data Security in Cloud Computing
<b>P. Subhasri</b> , Ph.D. Scholar and <b>Dr. A. Padmapriya</b> , Associate Professor	Advanced Multilevel Encryption for DICOM Images
<b>M.Sc II Year Students</b>	
<b>K.suganya</b>	An Android Application for AID uneducated Deaf and Dumb People
<b>K.Manonmani</b>	An Andriod Application for Farm crop Management
<b>G.Viji</b> and <b>Dr. S. Santhosh Kumar</b> , Assistant Professor	Brain Tumor Prediction using EEG signal classification and Artificial Neural Network Techniques
<b>J.Muthulakshmi</b> and <b>Dr. S. SanthoshKumar</b>	Evaluation of Ontological Approaches for Common Framework
<b>R.Saranya</b> and <b>Dr. S. Santhosh Kumar</b>	Identification of Type 2 Diabetes using Gene Expression and Feature Extraction Techniques.
<b>M.Bagavathi</b> and <b>Dr. S. SanthoshKumar</b>	Multi access model for personal health data in cloud computing
<b>M.Sc. I Year Students</b>	
<b>R.Gunalakshmi</b> , <b>T.M. SakthiHarishma</b> and <b>K.Silambarasi</b>	Scripting and its Features
<b>U.Archana</b> and <b>R. Muthulakshmi</b>	HTML DOM Events
<b>J.Sasikala</b> and <b>S.Aarthi</b>	Standards of URL and Its Applications
<b>G.Sowmya</b> and <b>N. Akshaya</b>	Secured Communicatin using Https Protocol

## One Day Workshop - February 16, 2017



*Welcome Address by Dr. E. Ramaraj in One Day Workshop Department of Computer Science has organized One Day Workshop on “Public Key Cryptography and Key Distribution”. Prof. S. R. Subramanya, School of Engineering & Computing, National University, San Diego, California, USA, delivered expert lecture and conducted the workshop.*



*Hands-on Session in One Day Workshop on Public Key Cryptography and Key Distribution*

## Two Days Workshop on Career Prospects & Developments in Computer Science February 27-28, 2017



*Hon. Registrar Prof. V. Balachandran Inaugurates the Two Days Workshop, Prof. Vaseeharan, Director, Business Collaboration Centre and Prof. E. Ramaraj are on the picture*

Department of Computer Science in association with Business Collaboration Centre has organized two days workshop. IT Professionals from Industries delivered Expert Lectures and appealed to the students to equip themselves to become employable. **Mr. Karthik Venkatraman**, Lead Applications Architect, Algorics Pvt Ltd, Bengaluru delivered a lecture on “Data Visualization using Tableau”. **Mr. R. Sivakumar**, Software Engineer, Accel Frontline Ltd, Chennai, delivered a lecture on “Web Application Development Templates”. **Mr. T. Michael Raj**, Associate Software Developer, BancaSella, Chennai, delivered a lecture on “Emerging Trends and Job Opportunities for developers in Java”.



*Mr. Sivakumar delivering lecture in Two days workshop*



*Mr. Karthik Venkatraman delivering Keynote Address*



*Mr. Michael Raj delivering lecture and interacting with students*

### **Panel discussion on Family and Work Balance for Women – March 01, 2017**

Department of Computer Science in association with Women Empowerment Cell has organized a Panel discussion. Chief Guest **Mrs. Dr. S. Maheswari, System Programmer, Alagappa University** opened up the discussion and interacted with women students of Department of Computer Science.



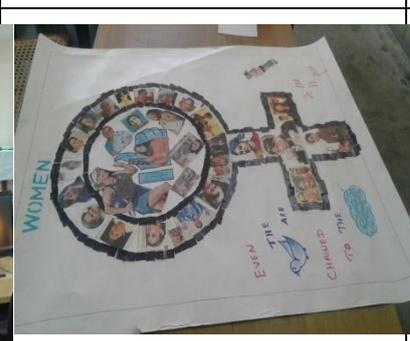
*Dr. S. Maheswari, System Programmer, Alagappa University in Panel Discussion*

**Ph.D. Public Viva-Voce Examination - March 4, 2017, 11:00 a.m.**

Ms. P. Geetha defended public viva-voce examination on her thesis “Efficient Frequent Trajectory Pattern Mining Algorithm for Trajectory Database”. Dr. E. Ramaraj, Prof. & Head (i/c), Convener and Research Supervisor and External Examiner, Dr. R.A. Khan, Professor, Department of Information Technology, Dr. B.R. Ambedkar, Central University, Lucknow conducted the examination.

**Women’s Day Competitions for students March 07, 2017**

Department of Computer Science has organized Women’s Day Celebration and conducted various competitions. I M.Sc. students of Department of Computer Science participated and secured prizes.

		
		
<p><i>Prize Winners with women faculty of DCS</i></p>	<p><i>Poster Making Competition</i></p>	<p><i>Women Architects of DCS</i></p>

### **Invited Talk on IT Trends and Job Opportunities – March 10, 2017**

Department of Computer Science, Alagappa University arranged an invited lecture on “IT Trends and Job Opportunities” on 10-03-2017. Mr. S. Muthukaruppan, Senior Consultant Infosys, Chennai, delivered expert lecture. He has motivated the students to learn Java and grab job opportunities.



*Mr. S. Muthukaruppan, being honored by Prof. and Head E. Ramaraj and Prof. K. Kuppusamy*

### **National Conference on Emerging Trends in Computing – March 13-14, 2017**

Department of Computer Science has organized Two days National Conference on “Emerging Trends in Computing” NCETC 2017 during March 13-14, 2017.

Dr. E. Ramaraj, Prof. & Head, Department of Computer Science and convener of the conference delivered the welcome address. Hon. Prof. S. SubashChandrabose, Member of Syndicate, Alagappa University, in his presidential address, pointed out the need for solution architects and motivated the young researchers. He stressed the need for problem solving due to emerging technologies. He has released the conference proceedings and CD containing abstracts of all the papers submitted to the conference secretariat.

Dr. S.S. Dhenakaran, Professor, Department of Computer Science, coordinator of the conference delivered the thematic address. In his speech, he has touched all the recent developments in solar energy and achievements of IIT students in those technologies.

Domain expert Mr. Harish, Associate Director, Algorics, Bengaluru delivered keynote address and motivated the participants in problem solving. In his expert lecture, he has explored the software engineering models and AGILE techniques followed by Amazon and Google and their success stories.

Domain expert Mr. Avinash, Associate Solution Architect, Tata Consultancy Services, Chennai, delivered keynote address and motivated the participants in design and solution evolving. In his expert lecture on Internet of Things (IoT), he has pointed out all the benefits of IoT in revenue growth, customer convenience, pay for use, detection of traffic rule violations, AI, disaster management and device connections. Dr. A. Padmapriya, Associate Professor, Department of Computer Science, proposed vote of thanks in inaugural session.

Totally 135 papers were submitted to the conference secretariat. Participants presented their papers in three parallel sessions. All the faculty members of Department of Computer Centre and computer centre, skill development centre chaired the technical sessions. There were 30 poster presentation by participants.

Prof. Narayanamoorthy, Hon. member of syndicate, Alagappa University delivered a lecture on computer applications in economics analysis. He has demonstrated all the features of SPSS package which are very useful to researchers. He has outlined the economic position of India and the factors influencing it.

Dr. TR. Sivaramakrishnan, former director Meteorology Department of India and former research dean, SASTRA university delivered a thought provoking lecture on data mining trends in Atmospheric Study. He has demonstrated how the data mining techniques are used in weather prediction and related issues.

Dr. T. Meyyappan, Professor, Department of Computer Science presented a report on conference proceedings. Dr. S. Santhoshkumar, organizing secretary has made all the arrangements and proposed vote of thanks in valedictory session. M.Sc. students, research scholars from the Department of Computer Science and other institutions all over Tamilnadu have participated.

All the experts have interacted with participants and made clarifications. This conference has imparted research ideas and induced learners to pursue research in computer science.



*Dr. E. Ramaraj, Prof. and Head, Delivering Welcome Address*



*Prof. SubashChandrabose, Hon. member of Syndicate delivering Presidential Address in NCEETC 2017.*



*Conference Proceedings and CD release by Prof. SubashChandrabose and other dignitaries.*



*Prof. S.S. Dhenakaran delivering thematic address in NCETC 2017*



*Mr. Harish, Algorics, Bengaluru delivering Keynote Address in NCETC*



*Mr. Avinash, Tata Consultancy Services, Chennai, delivering keynote address in NCETC 2017*



*Dr. A. Padmapriya proposing vote of thanks in inaugural session of NCETC*



*Prof. Gurunathan, Hon. Member of Syndicate delivering valedictory address in NCETC 2017*



*Prof. T. Meyyappan presenting Conference Report in NCETC 2017*



*Participants receiving certificates and best paper award in NCETC 2017*



*Dr. S. Santhoshkumar, Assistant Professor and Organizing Secretary proposing vote of thanks in NCETC*

## **STUDENT INVOLVEMENT AND PARTICIPATION**

### **Science Campus Cleaning – March 04, 2017**

National Service Scheme wing of Alagappa University has organized Science Campus Cleaning Programme. Students of M.Sc. First Year engaged themselves in cleaning the Science Campus premises and made it liter- free and plastic-free zone.



## **STUDENT ACHIEVEMENTS**

### **M – Fest 2K17, Symposium February 24, 2017**

MCA Association of ACCET, Karaikudi, Organized M-Fest 2K17 Symposium and conducted competitions for computer science students. M.Sc. I year students gave their active participation and secured prizes.

#### **Participants and Events:**

1. KN. M. Narmatha – Memes Creation.
2. P. Pandeswari and N. Sowmya – Fun Events.
3. M. Nachu and R. Venkateswari – Presented a paper on the title “ Smart Card Security”.
4. N. Akshaya and G. Radhika – Presented a Paper on Title “Blue Brain”.
5. R. Sindhuja – Poster Presentation.

#### **Winners:**

1. KN. M. Narmatha – Memes Creation bagged First Prize of Rs. 500 Cash Award.
2. P.Pandeswari and N. Sowmya – Fun Events bagged First Prize of Rs. 500 cash award.



*Interface'17 Winners with Head of the Department Dr.E.Ramaraj*

## INTERFACE – 2K17 – For Computer Excellence, March 07, 2017

M.Sc. First Year Students of Department of Computer Science actively participated in INTERFACE - 2K17, conducted by Association for Computer Excellence, Gandhigram Rural Institute – Deemed University, Dindigul, competitions for P.G. students on March 07, 2017. Our students have bagged cash awards.



### Participants and Events:

1. KN. M. Narmatha and R. Sindhuja  
PLACARD.
2. KN. M. Narmatha and R.Sindhuja –  
INFOART.
3. M. Nachu and R.Venkateswari –  
PAPER PRESENTATION
4. J. Esther Grace and M. SolaiMuthu –  
BUG BLOT OUT.
5. J.Esther Grace and M. SolaiMuthu -  
BRAIN STROM.
- 6.B. Senbhagapriya –  
AS YOU LIKE IT.

### Winners

1. M.Nachu and R.Venkateswari –  
Presented a paper on the title  
“ CAPTCHA ”and bagged FIRST  
PRIZE Rs. 2000 Cash Award



## VISITORS

The national conference NCETC 2017 is wonderfully organized. The team of staff members are very helpful and coordinated the event very well.

*Harish, Associate Director, Product Engineering, Algorics, Bengaluru.*

It is a great pleasure for me to speak about IoT(Internet of Things) in your institution. I feel honored to involve myself in skill development of students. Thanks.

*Avinash, Associate Solution Architect, Tata Consultancy Services, Chennai.*

It is a pleasure to share the ideas in the national conference. I have enjoyed the visit and deliberations.

*Dr. T. R. Sivaramakrishnan, former Director, Meteorology Department of India,  
former Dean Research, SASTRA university.*

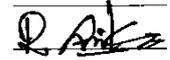
Arrangements for my presentation are very good. I had the opportunity to meet various presentors presenting their work on emerging trends in computing

*ThasilAhamed, Manager, Cape Gemini Pvt. Ltd., Bengaluru.*

It is a pleasure and honour to stand before students and share my industrial experience. It is a good experience too. Thank you for inviting me for lecture.

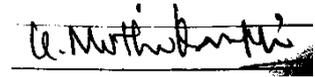
*R. Sivakumar, Accel Frontline Limited, Chennai*

I am so happy to come here again as a resource person for technical session. It is a great honour to me. Thanking for the opportunity given to me.



*T. Michael Raj, BancaSella, Chennai*

I feel honored to deliver motivational speech to M.Sc. computer science students. The students are much interactive. They have interrogated me to get answers for their queries.



*K. Muthukaruppan, Infosys, Chennai.*