

# **K.L.N COLLEGE OF INFORMATION TECHNOLOGY**

**POTTAPALAYAM - 630612. SIVAGANGAI DISTRICT**

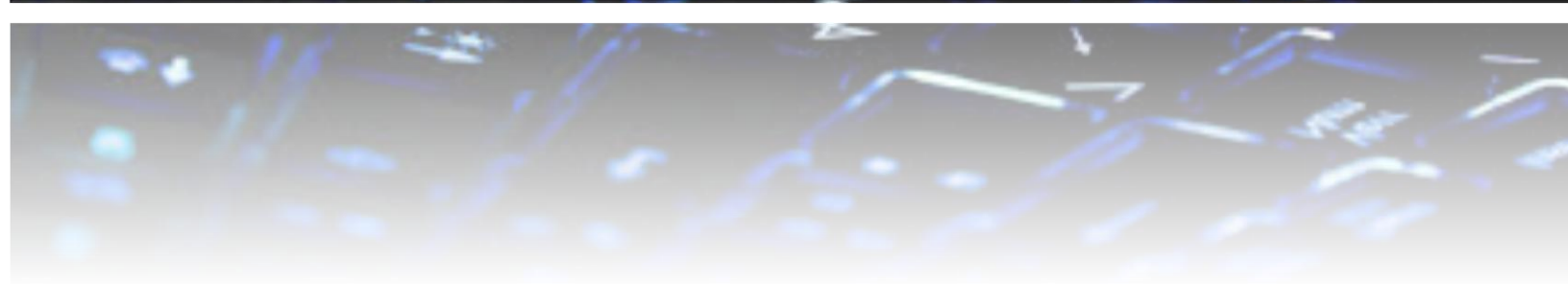
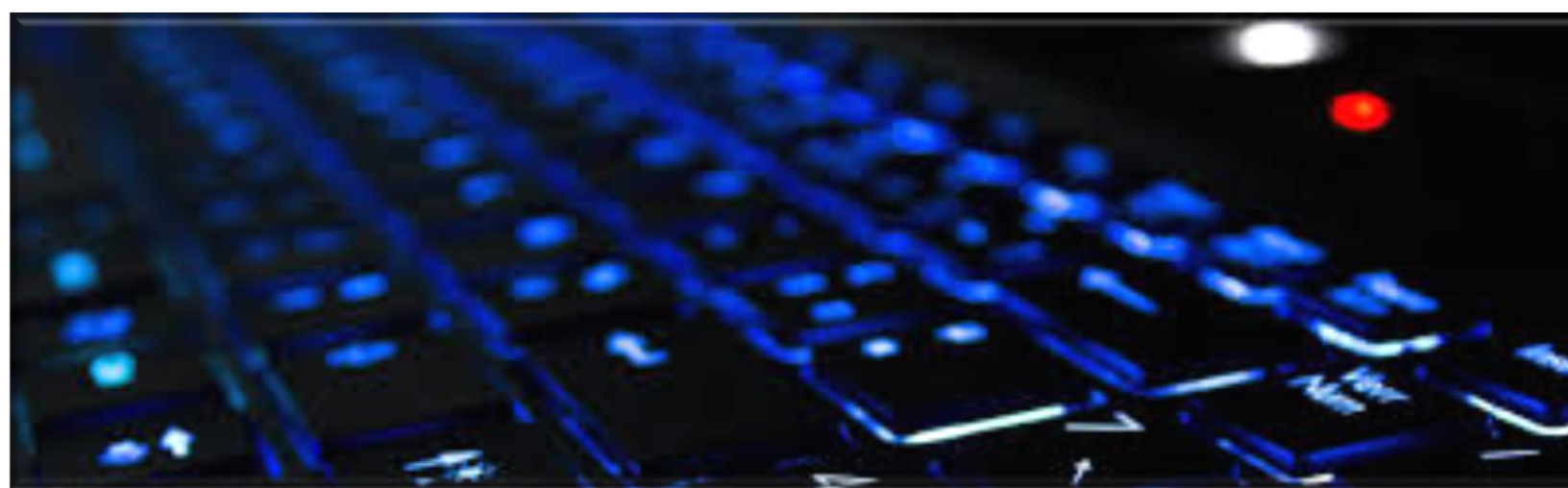
**APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI**

**ACCREDITED BY NBA-AICTE FOR B.E - CSE, ECE & B.TECH - IT BRANCHES**



## **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**(FOR THE ACADEMIC YEAR 2016 - 2017, RELEASE: July - December 2016)**



The Department of Computer Science and Engineering was established in the year 2001 with the aim of imparting quality education to the students. The Department has been accredited by National Board of Accreditation (NBA) and also permanently affiliated by Anna University for UG Programme. The Department offers two courses: B.E. (Computer science and Engineering) with an intake of 120 seats and M.E (Computer Science and Engineering) with an intake of 24 seats.

The Department has very good infrastructure with four well equipped air-conditioned Laboratories, Seminar Hall, Department Library and Class Rooms with LCD projectors.

The Department has well qualified faculty members continuously upgrading their knowledge by presenting papers in conferences, attending faculty development training programs to optimize the cutting edge technology prevailing in the field of Information Technology.

Most of the faculty members are the members of Professionals bodies like ISTE, CSI. The Department has sanctioned with the grant-in-aid under Entrepreneurship Development Cell (EDC) Scheme by AICTE. The Department has signed MoU with leading organizations like IBM, Microsoft, ICTACT, Winways etc.

### Technical Events Organized

Conferences/FDP/Workshop/Symposium/Student Development Programmes/  
Guest Lectures/Alumni Interaction/Alumni Meet MoU/ Professional activities  
organized





## **VISION**

The Vision of the Department of Computer Science and Engineering is to become a center of excellence for quality education and research by providing the best opportunity to the students for attaining technical excellence in emerging technologies and to develop a comprehensive and integrated personality.

## **MISSION**

The Mission of the Department of Computer Science and Engineering is to prepare students for productive careers in industry, academic and government by

- Providing an outstanding environment for teaching, learning and research in the theory and applications of Computer Science and Engineering.
- Inculcating the values of ethics and social responsibilities.

## **PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)**

To produce graduates who can demonstrate competence for their successful employment in industries, academic institutions, government organizations or to pursue higher studies.

To promote design, research, and implementation of products and services in the field of Computer Science & Engineering through strong communication, leadership, and entrepreneurial skills.

To inculcate students with adequate training and opportunities to work as teams on multidisciplinary projects and with an ability to relate computer science engineering issues with social awareness.

To promote student awareness on continuous learning and to practice professional ethics and morale in their career.

## PROGRAMME OUTCOME (POS)

**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**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.

**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.

**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**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.

**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.

**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**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.

**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.

**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)**

Ability to solve complex problems and design systems using algorithm analysis and principles of Software Engineering, to face the challenges in corporate and industries.

Ability to use skills, techniques, research based knowledge and methods and computer-aided software engineering tools for developing innovative projects in computing technologies and to develop lifelong learning skills.

Ability to communicate and function effectively as an individual and as a member or leader in multi-disciplinary teams to understand the impact of revolution in modern computerization in global, economic and societal context.

Ability to understand the need for sustainable development in software industries and to follow the professional ethics with a good understanding of their responsibilities and roles in society.



# Gallery



# FACULTY ACTIVITIES

## PARTICIPATION IN SEMINAR/CONFERENCE/ WORKSHOP

Name of the Program	Title	Name of the Staff	Date / Duration	Venue
Workshop	Platforms for Big Data Analytics	G.Dinesh	15.07.16 & 16.07.16	National Institute of Technology -Trichy
ISTE sponsored two day National Workshop	Software Testing Tools & Techniques-selenium	Ms.S.Dhivya	18.09.16 & 19.09.16	Velammal College of Engg & Technology
ISTE sponsored two day National Workshop	Software Testing Tools & Techniques-selenium	Ms.S.Jeniba	18.09.16 & 19.09.16	Velammal College of Engg & Technology
ISTE sponsored two day National Workshop	Software Testing Tools & Techniques-selenium	Ms.T.T.Mathangi	18.09.16 & 19.09.16	Velammal College of Engg & Technology
TEQIP-II sponsored Workshop	Research paper writing	Ms.S.Dhivya	26.08.16	Thiyagarajar college of Engineering
TEQIP-II sponsored Workshop	Research paper writing	Ms.S.Jeniba	26.08.16	Thiyagarajar college of Engineering
TEQIP-II sponsored Workshop	Research paper writing	Ms.T.T.Mathangi	26.08.16	Thiyagarajar college of Engineering
DST SERB sponsored Seminar	Current Research Trends in Computational Techniques in Bioinformatics	Dr.R.Aghila	21.09.16 to 23.09.16	Thiyagarajar college of Engineering
ISRO sponsored Indian conference on Data Analytics,Big data ,Data Mining and Data science	A PSN Method and PB Technique to detect duplicate data set	Ms.T.T.Mathangi Ms.S.Dhivya Ms.S.Jeniba	27.10.16 & 28.10.16	KLNCIT
ISRO sponsored Indian conference on Data Analytics,Big data ,Data Mining and Data science	A Routing principle for smooth streaming of video Traffic over wireless Multihop Networks	Ms.T.T.Mathangi Ms.S.Dhivya Ms.S.Jeniba	27.10.16 & 28.10.16	KLNCIT

<b>ISRO sponsored Indian conference on Data Analytics,Big data ,Data Mining and Data science</b>	<b>Multifactor Authentication for Data Migration to preserve integrity and security in cloud</b>	<b>Dr.M.Arunachalam Ms.M.Kumudha</b>	<b>27.10.16 &amp; 28.10.16</b>	<b>KLNCIT</b>
<b>ISRO sponsored Indian conference on Data Analytics,Big data ,Data Mining and Data science</b>	<b>Secure storage services in cloud computing</b>	<b>Ms.R.Saraswathi Meena</b>	<b>27.10.16 &amp; 28.10.16</b>	<b>KLNCIT</b>
<b>ICMR Sponsored National Workshop</b>	<b>Exploring the impact of Data Analytics in Health care</b>	<b>Dr.A.Askarunisha,</b>	<b>07.11.16 To 11.11.16</b>	<b>KLNCIT</b>
<b>ICMR Sponsored National Workshop</b>	<b>Exploring the impact of Data Analytics in Health care</b>	<b>Ms.S.J.Subhashini,</b>	<b>07.11.16 To 11.11.16</b>	<b>KLNCIT</b>
<b>ICMR Sponsored National Workshop</b>	<b>Exploring the impact of Data Analytics in Health care</b>	<b>Ms.K.Nagalakshmi,</b>	<b>07.11.16 To 11.11.16</b>	<b>KLNCIT</b>
<b>ICMR Sponsored National Workshop</b>	<b>Exploring the impact of Data Analytics in Health care</b>	<b>Ms.D.Deepika,</b>	<b>07.11.16 To 11.11.16</b>	<b>KLNCIT</b>
<b>ICMR Sponsored National Workshop</b>	<b>Exploring the impact of Data Analytics in Health care</b>	<b>Ms.R.Saraswathi Meena</b>	<b>07.11.16 To 11.11.16</b>	<b>KLNCIT</b>
<b>Two Day Workshop</b>	<b>Computational Intelligence for Big data Analytics</b>	<b>Ms.R.Saraswathi Meena</b>	<b>17.11.16 &amp; 18.11.16</b>	<b>Thiagarajar College of Engineering</b>
<b>One day Workshop</b>	<b>R software for statistical Computing in Research</b>	<b>Dr.M.Parvathy</b>	<b>11.11.16</b>	<b>Thiagarajar College of Engineering</b>
<b>One day Workshop</b>	<b>R software for statistical Computing in Research</b>	<b>Ms.B.Tamilselvi</b>	<b>11.11.16</b>	<b>Thiagarajar College of Engineering</b>





**Dr.M.Parvathy, Professor of CSE Department attended a Training Program - TEQIP sponsored Two Days IEEE FDP on “Hands on Training-Hadoop” at Thiagarajar college of Engineering on 15.07.16 & 16.07.16**

**Mr.G.Ganesan, ASP/CSE, attended an FDP on Software Safety and Security at Thiagarajar college of Engineering on 09.09.16**

**Dr.R.Aghila - Professor/ CSE , Mrs P.Suganthi - AP/CSE, Mr.G.Ganesan - ASP/CSE , Ms.R.Saraswathi Meena - AP/CSE attended an ICTACT Sponsored FDP “Grid and Cloud Computing” at KLNCIT from 06.09.16 To 10.9.16**

**Ms.S.J.Subhashini, ASP/CSE and Ms.K.Nagalakshmi, ASP/CSE attended TEQIP-II sponsored Two Day FDP on N/W Security Tools at Thiagarajar college of Engineering on 28.9.16**

## **FACULTY TRAINING PROGRAMMES**



## DEPARTMENT ACTIVITIES

Anna University approved seven days Faculty Development Training Programme on Theory of computation was conducted from 06.06.16 to 12.06.16. The FFTP was handled by both the internal and the external resource persons from PSNA College of Engineering and Technology and KLNCE. The external resource persons include Dr.Uma Maheswari Professor/CSE and Dr.S.Jeyanthi Assistant Professor/CSE from PSNA College of Engineering and Technology, and Ms.R.Lakshmi Associate Professor/CSE from KLNCE. The internal resource persons were Dr.M.Arunchalam Professor &Hod/CSE, Dr.K.T.Nagalakshmi, Professor&Head/ Mathematics, Dr.R.Aghila Professor/CSE, Ms.S.J.Subhashini Associate Professor/CSE, Mr.S.K.Kartikumar Professor/IT and Mr.G.Ganesan Associate Professor/CSE.

A guest lecture on “Digital Transformation” was delivered by Mr.T.Karthik Kannan, Senior Officer, Academics, TIME to the final year CSE students on 23.07.16.

Mr. Rajendran Subramanian, CEO&Founder, Silicon software services, headed the CSI Sponsored two days Workshop on "Web Technologies" held on 29.07.16 &30.07.1

CSE Students Association - Ordinateur 2016 held on 29.07.16 and Mr. Rajendran Subramanian, CEO & Founder, Silicon software services was invited as the chief guest.

Ms.R.Karunya, Assistant Professor, Vickram College of Engineering delivered a guest lecture on “Human Traits for unique Identity” on 30.07.16

A guest lecture regarding Placement Opportunities in IT Sector was organized on 02.08.2016, in which Mr. Rajendran Subramanian, CEO & Founder, Silicon software services shared his aspects with the final year CSE students.

One day Technical Camp-Microsoft Dreamspark Technovanza '16 was conducted on 19.08.16 by Microsoft Dreamspark Co-ordinator Mr.G.Ganesan, ASP/CSE.

Guest Lecture on “Wireless sensor Networks and Applications” was organized on 24.08.16. The resource person was Dr.B.Manimegalai,ASP/ECE from Thiagarajar College of Engineering,Madurai.



## ACHIEVEMENTS

EDC Cell of our College received the Recurring Grant-in-aid Rs. 3,00,000/- From AICTE-RIFD, New Delhi for the year 2016-2017.

Our department staff members achieved 100% result with their overall effort and dedication towards the students.

- Mr.K.Vignesh AP/CSE handled GE 2025 - Professional Ethics in Engineering and achieved 100% result.
- Ms.S.Dhivya attained 100% result in CP 7301 - Software Process and Project Management.
- Mr.P.Ajeeth obtained 100% result for CP 7029 - Information Storage Management.



Our department PG students bagged three university ranks and came out with flying colors.

The rank holders are R.Sumithra (14) , K.R. Rincy (33) and M.Kumudha (43).

Our deparment players have won the following matches with their grit and determination.



Z.Afrin of I year CSE participated and won in both inter-zonal and district level Judo match.

A.Manivannan and N. Hari Raj of I year/CSE won District level Judo match.

K.Ashok Kumar of Illyear/CSE showed his team spirit in the District level Cricket match and the team won the trophy



Our department future young scientists have received Dr.Kalam Social Activist Award 2016 under the NATIONAL YOUTH AND STUDENTS DAY State-level contest organized by World Youth Federation.

The award winners are M.D.Kishore Babu and D.Vivekanandhan of Final year/CSE, and N.Yuvaraj and Natammai Deepak Sundarajan of III year/CSE.



## CERTIFICATE OF RECOGNITION

**ICT ACADEMY**  
Innovate... Collaborate... Educate...

This is to certify that the practice on

**Employability Enhancement**

by

**K L N College of Information Technology, Sivagangai**

has been selected and published in

Best Practices - Higher Education in Tamil Nadu - a Compendium by ICT Academy

released at 25th Edition of "BRIDGE" 2017 on Feb 28, 2017

*G. M.*  
Jury Member

*M. Sivakumar*  
M Sivakumar  
Chief Executive Officer, ICT Academy

  
**Best Practices  
Higher Education  
Tamil Nadu 2017**

An article on "Employability Enhancement" from the Department of CSE, KLNCIT, Sivagangai was selected and published on 28.02.17 in the 25th edition of "BRIDGE" - a Compendium by ICT Academy.

*M. Sivakumar*  
M Sivakumar  
Chief Executive Officer, ICT Academy

*G. M.*  
Jury Member

**Best Practices  
Higher Education  
Tamil Nadu 2017**  




## FACULTY PUBLICATIONS

S.No	Name Of The Staff	Designation	Name of the Conference/ Journal	Details of publication	Title of the paper
1.	Dr.M.Arunachalam	Professor & Head	<b>ISRO SPONSERED INDIAN CONFERENCE ON DATA ANALYTICS, BIG DATA, DATA MINING AND DATA SCIENCE</b>	(ICD4'16)	<b>DATA PROCESSING AND ENERGY REVITALIZATION USING VIRTUAL MACHINE FOR CLOUD COMPUTING ENVIRONMENT</b>
2.	Dr. M. Parvathy	Professor	<b>Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems</b>	ICDASDC 2016	<b>ANALYSIS OF FEATURE EXTRACTION ALGORITHM</b>
3.	S.J Subhashini K. Nagalakshmi	Associate Professor	<b>INTERNATIONAL JOURNAL OF SCIENTIFIC ENGINEERING AND APPLIED SCIENCE</b>	IJEAS VOLUME -2 ISSUE 6	<b>EFFICIENT MOBILE DATA GATHERING IN WSN BASED ON HORA ALGORITHM</b>
4.	Dr. M. Arunachalam	Professor	<b>Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems</b>	ICDASDC 2016	<b>CLOUDLET USING OHWE AND IMPLEMENTING SECURITY USING AUTO VERIFICATION TECHNIQUE AN ARBITRARY APPROACH</b>
5.	G. Balakrishnan G. Ganesan	Associate Professor	<b>Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems</b>	ICDASDC 2016	<b>EFFICIENT FILE REPLICATION WITH SECURITY ENHANCEMENTS IN P2P MANET</b>

## FACULTY PUBLICATIONS

6.	G. Ganesan G. Balakrishnan	Associate Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	A REVIEW ON NOVEL FRAMEWORK FOR CLOUD BASED VISUALIZATION SERVICES
7.	P. Ajeeth G. Dinesh	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	ENERGETIC IMAGE DENOISING SYSTEM USING OPTIMAL FILTERING APPROACH
8.	P. Ajeeth G. Dinesh	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	AN APPROACH FOR GENETIC FEEDBACK REGULATOR FOR REAL TIME SYSTEM
9.	S. Dhivya	Assistant Professor	International Journal of Contemporary Research in Computer Science and Technology	IJRCST, Volume 2, Issue 12 (December 2016)	UP- TREE STRUCTURE FOR POTENTIALLY HIGH UTILITY ITEMSETS
10.	S.J Subhashini K. Nagalakshmi	Associate Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	A SPATIAL INVERTED INDEX SEARCHING FOR NEAREST NEIGHBOR USING KEYWORDS
11.	P. Ajeeth G. Dinesh	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	AN OPTIMISTIC SOLUTION FOR PEER-TO-PEER MULTI KEYWORD SEARCHING USING BLOOM FILTER SETTINGS
12.	T.T Mathangi	Assistant Professor	International Journal of Contemporary Research in Computer Science and Technology	IJRCST, Volume 2, Issue 12 (December 2016)	UP- TREE STRUCTURE FOR POTENTIALLY HIGH UTILITY ITEMSETS
13.	R. Saraswathimeena B. Priyadarshini	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	AN OPTIMAL RESOURCE UTILIZATION USING PLANNER FOR CLOUD ENVIRONMENT

## FACULTY PUBLICATIONS

14.	J. Dinesh	Assistant Professor	ISRO SPONSERED INDIAN CONFERENCE ON DATA ANALYTICS, BIG DATA, DATA MINING AND DATA SCIENCE	(ICD4'16)	DATA PROCESSING AND ENERGY REVITALIZATION USING VIRTUAL MACHINE FOR CLOUD COMPUTING ENVIRONMENT
15.	S. Shiva Shankar K. Vignesh	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	ANALYSIS OF FREQUENT HUMAN BEHAVIOURAL PATTERN FROM MULTIVARIATE TEMPORAL DATA BY RECURRENT EXTRACTOR ALGORITHM
16.	S. Jeniba	Assistant Professor	International Journal of Contemporary Research in Computer Science and Technology	IJCRCST, Volume 2, Issue 12( December 2016)	UP- TREE STRUCTURE FOR POTENTIALLY HIGH UTILITY ITEMSETS
17.	K. Nagalakshmi S.J Subhashini	Associate Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	INTEGRITY AND AVAILABILITY OF THE DATA USING HOMOMORPHIC TOKEN IN CLOUD COMPUTING
18.	T.T. Mathangi S. Dhivya S. Jeniba	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	FINDING SEMANTIC SIMILARITY BETWEEN WORDS AND EXTRACTION OF NAME ALIASES USING WEB SEARCH ENGINE APPROACH
19.	P. Suganthi	Associate Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	FINDING SEMANTIC SIMILARITY BETWEEN WORDS AND EXTRACTION OF NAME ALIASES USING WEB SEARCH ENGINE APPROACH
20.	R. Saraswathimeena	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	A MEMORY EFFICIENT PATTERN MATCHING ALGORITHM FOR NETWORK INTRUSION DETECTION SYSTEM

## FACULTY PUBLICATIONS

21.	J. Dinesh M. Kumudha	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	CLOUDLET USING OHWE AND IMPLEMENTING SECURITY USING AUTO VERIFICATION TECHNIQUE AN ARBITRARY APPROACH
22.	R. Saraswathimeena	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	TWO IN ONE MEDIA PLAYER IMPLEMENTATIO FOR DUAL USER INTERACTION
23.	C.H. Sumalakshmi B. Tamilselvi	Assistant Professor	Fifth international Conference on Design and Applications of Structures, Drives, Communicational and Computing Systems	ICDASDC 2016	AUTOMATIC FACIAL FEATURE RECOGNITION AND EXPRESSION ANALYSIS USING DATA FUSION
24.	Dr.M.Parvathy	Professor	IJSEAS Vol.12 Issue 12	International Journal of Scientific Engineering	Securing the automation process
25.	Dr.M.Arunachalam Ms. M. Kumudha	Hod Professor Assistant Professor	ICD4 -16	ICD4-16	Multifactor Authentication for Data Migration to pressure integrity and Security in cloud
26.	R. Saraswathi Meena	Assistant Professor	ISRO Sponsored ICD4'16	ICD4-2016	Secure Storage services in cloud computing







## CHAIR PERSON

S.No	Date	Title	Resource Person
1.	27.10.2016	ISRO Sponsored Indian Conference On Data Analytics, Big Data, Data Mining and Data Science ICD4'16	Dr.M.Arunachalam, HOD/CSE
2.	27.10.2016	ISRO Sponsored Indian Conference On Data Analytics, Big Data, Data Mining and Data Science ICD4'16	Dr.A.Askarunisha, Prof./CSE
3.	27.10.2016	ISRO Sponsored Indian Conference On Data Analytics, Big Data, Data Mining and Data Science ICD4'16	Dr.M.Parvathy, Prof./CSE
4.	27.10.2016	ISRO Sponsored Indian Conference On Data Analytics, Big Data, Data Mining and Data Science ICD4'16	Dr.R.Aghila, Prof./CSE

# PLACEMENTS



S.No	Name	Company Name
1.	Ms. T.R.AASHIKA VASRA	M/S Infoview Technologies, Chennai
2.	Ms. M.BHAVADARANI	
3.	Ms. T.R.AASHIKA VASRA	M/S Vee Technologies, Salem
4.	Ms. M.BHAVADARANI	
5.	Mr. R.S.ASHOK CHAKRAVARTHI	
6.	Mr. M.D.KISHORE BABU	
7.	Ms. R.C.GAYATHRI	
8.	Ms. P.KEERTHANA	M/S JSK Info Link, Erode
9.	Mr. T.R.SABARISH	
10.	Ms. D.ANGEL GLORIA	
11.	Ms. A.ANISH HALIMAA	
12.	Ms. R.S.UTHRAA	
13.	Ms. P.J.POOJA	
14.	Ms. R.ANUPRIYA	M/S Zonetech Solutions Pvt. Ltd., Chennai
15.	Mr. T.R.SABARISH	
16.	Ms. D.ANGEL GLORIA	
17.	Ms. S.SRIVIDHIYA	
18.	Ms. K.LAVANYA	
19.	Mr. O.M.SARAVANAKUMAR	M/S Sutherland Global Service, Chennai
20.	Ms. D.ANGEL GLORIA	
21.	Ms. R.C.GAYATHRI	
22.	Ms. S.SRIVIDHIYA	
23.	Ms. D.SANCHANA RATHNAM	
24.	Ms. S.VIDHYA SHREE	

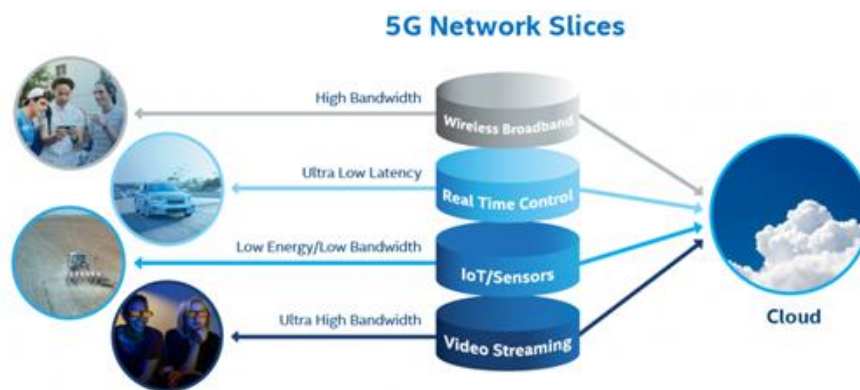
25.	Ms. R.SHARMILA	
26.	Mr. B.VINOD KUMAR	
27.	Ms. U.I.ANU	
28.	Ms. A.ANISH HALIMAA	
29.	Ms. K.LAVANYA	
30.	Ms. R.VIJAYALAKSHMI	
31.	Ms. S.VIDHYA SHREE	
32.	Ms. P.KEERTHANA	<b>M/S. Ecare India Ltd., Tirunelveli, &amp; Chennai</b>
33.	Ms. B.SYED ALI FATHIMA	
34.	Ms. B.INDHUJA	
35.	Ms. N.MUTHUMARI	
36.	Ms. N.RATHIKA	
37.	Ms. A.ANISH HALIMAA	<b>M/S. CSS Corp</b>
38.	Ms. P.KEERTHANA	
39.	Ms. R.S.UTHRAA	<b>M/S Enoah Isolution, Chennai</b>
40.	Ms. R.VIJAYALAKSHMI	
41.	Ms. R.C.GAYATHRI	
42.	Ms. D.SANCHANA RATHNAM	
43.	Ms. R.MONISHA	<b>M/S Ethnus, Bangalore</b>
44.	Ms. N.B.MADHUMITHA	
45.	Ms. R.SHINDHUJA	
46.	Mr. D.VIVEKANANDHAN	<b>M/S ABIBA Systems, Bangalore</b>
47.	Mr. B. VINOD KUMAR	
48.	Mr. M.VEERAPANDI	<b>M/s Apptivo Software Pvt. Ltd.,</b>
49.	Ms. R.MONISHA	



## STUDENT ARTICLES

### 5G NETWORK SLICING WILL ALLOW OPERATORS TO SPLIT A SINGLE PHYSICAL NETWORK INTO MULTIPLE VIRTUAL NETWORKS

Telecommunication vendors and mobile operators are taking the necessary steps in order to get ready for 2020, the year commercial “5G” networks are expected to become a reality. But the industry consensus is that 5G networks will be much more than just new radio access as these future networks will be an integration of cross-domain networks. In a single 5G system, network slicing technology can provide connectivity for smart meters with a network slice that connects “internet of things” devices with a high availability and high reliability data-only service, with a given latency, data rate and security level. At the same time, the technology can provide another network slice with very high throughput, high data speeds and low latency for an augmented reality service.



With network slicing technology, a single physical network can be partitioned into multiple virtual networks allowing the operator to offer optimal support for different types of services for different types of customer segments. The key benefit of network slicing technology is it enables operators to provide networks on an as-a-service basis, which enhances operational efficiency while reducing time-to-market for new services. Network slicing can support customized connectivity designed to benefit many industries by offering a smarter way to segment the network to support particular services or business segments. With this technology, slices can be optimized by myriad characteristics including latency or bandwidth requirements. Since the slices of the network are isolated from each other in the control and user planes, the user experience of the network slice will be the same as if it was a physically separate network.

Ericsson also said the implementation of network slicing technology requires the use of service provider software-defined networking, network functions virtualization and network orchestration tools. These technologies are seen as key to enable the many network slices necessary to meet the requirements of the many 5G use cases.

**By,**  
**vijayadurga.A, poongodi.P – Final Year**



## DNA-A DIGITAL DATA STORAGE

There's no doubt that, the world's biggest technology firms are rushing to build data centers all over the globe. And for good reason: The Internet of Things revolution is going to produce ungodly amounts of data from sensors on our bodies and in our cars, homes, and offices. Finding a way to efficiently store data is going to be one of next great challenges for the tech world. DNA digital data storage refers to any scheme to store digital data in the base sequence of DNA. This technology uses artificial DNA made using commercially available oligo nucleotide synthesis machines for storage and DNA sequencing machines for retrieval. This deals how the digital DNA storage going to resolve the biggest issue of storage in the mere future when technology like IOT, AI and Bigdata comes into emergence for the welfare of the techist.

### HOW DNA AS STORAGE TECHNOLOGY?

- Source data in form of binary bits (0 and 1) was converted to a tertiary bit code (0, 1 and 2) to decrease chances of encoding errors.
- Following the conversion, the digital data is encoded into the nucleobases of DNA.
- By altering the positions of nucleobases A, T, G and C, the tertiary code can be mapped onto the nucleobases codes, thus making a repetitive blocks of nucleobases that encode data.
- The encoded DNA then can be sequenced and read back to tertiary and then to binary data using technologies similar to those used to map the human genome.

### ADVANTAGES

- Long lived , stable.
- Store digital files without electricity for thousands of years.
- Can store zeta bytes data in one gram of DNA.

### DEVELOPMENTS

- Microsoft is making huge investment in DNA data storage research. The company reported that it had written 200 MB data, including War and Peace and 99 other literary classics, into DNA.
- Twist Bioscience of San Francisco used a machine to create the strings letter by letter that can build up to 1.6 million strings at a time.
- The field has scope for research in the coming years.

**By,**

***K.Thamaraimeena, K.Karthiga - Final year CSE***

## INDIA 7TH MOST AFFECTED NATION BY PETYA RANSOMWARE, SAYS SYMANTEC

According to a recent report released by Symantec revealing the list of top 20 countries based on their number of affected organisations by Petya ransomware, India is the seventh most affected nation after Ukraine, US, Russia, France, UK and Germany. It is also reported to be the worst hit in Asia. After Wannacry Ransomware that was targeting individual users, Petya ransomware is affecting organisations and is spreading using network techniques. It just needs a single fault in the network. If the Microsoft Patch has not been applied to a single machine on the network, it can easily infect other computers on the network.

According to Symantec blog, MEDoc, a tax and accounting software package, is used for the initial insertion of Petya into corporate networks. MEDoc is widely used in Ukraine, indicating that organisations in that country were the primary target. However, organisations in India are also affected. It was reported that one of the terminals at the Jawaharlal Nehru Port Trust has been impacted by the latest malware attack. Attackers are demanding a payment of \$300 worth of Bitcoins and asking users to send notification of payments to a single email address. Once the notification was received, the hacker would send 60 character code to unlock the encrypted files.

However, the user account on which victims were supposed to send notifications have been blocked and there is no way a consumer can send emails to the hacker. As a result, it is being assumed that Petya is not a Ransomware but a wiper that can damage and destroy files. It is suggested post infecting the computer, Petya ransomware waits for about an hour before rebooting the system. According to Hacker Fantastic's Twitter post, "If machine reboots and you

see this message, power off immediately! This is the encryption process. If you do not power on, files are fine." And as there is no way to receive the decryption key, one should format the hard disk and reinstall all the files from the latest backup.

**By,**  
**P.Priyadharshini, V.Pandeeswari – Final Year**

## THE DARK SIDE OF SHAREPOINT ONLINE

*SharePoint Online is spreading fast around the world, inciting companies to become cloud advocates. But before going Online, make sure you're ready to handle all the pitfalls of the cloud environment.*

Although SharePoint Online still lags behind the SharePoint on-premises versions in terms of active users, it has been gaining momentum for the last 2 years. Microsoft doesn't hide their passion for the cloud and keeps promoting the Office 365 suite. A massive marketing campaign seasoned with constant updates does the job well- during the Virtual SharePoint Summit this may, the corporation reported 90% growth in active users for SharePoint Online and OneDrive.

However, this movement to the cloud can disturb companies that got used to their on-premises deployments and have never planned any changes except upgrading or migrating their SharePoint solutions to the platform's higher version. The AIIM report on the impact of SharePoint 2016 showed that well- companies that actively use SharePoint 2007 and even 2003 are still here.

Yet, with such a dynamic growth of SharePoint Online solutions, it's hard to ignore the cloud offering- reduced infrastructure costs, simplified maintenance and support, ongoing functional and security upgrades. It is how the SharePoint paradise looks like, isn't it? The path to this paradise is pretty thorny, though, as the cloud brings several challenges to SharePoint owners who have to make tough decisions

## THE BRIGHT SIDE

Well, the road to the cloud can be quite difficult. However, this shouldn't scare you away from SharePoint Online, but instead help you make reasonable decisions about your existing SharePoint deployment. When you see all the possible pitfalls upfront, it is much easier to avoid project failures, be it a stalled SharePoint migration project, a poorly adopted cloud solution or extremely expensive customization.

If you are prepared to deal with the described challenges on your own or with your service provider, SharePoint Online can bring you a bunch of advantages, such as easier solution management and support, functional flexibility, richer collaboration capabilities and happier end-users.

**By,**  
**Raja Lakshmi – Final Year**

## ARTIFICIAL INTELLIGENCE, MACHINE LEARNING AND SMART THINGS PROMISE TO INTELLIGENT FUTURE

Today, a digital stethoscope has the ability to record and store heartbeat and respiratory sounds. Tomorrow, the stethoscope could function as an “intelligent thing” by collecting a massive amount of such data, relating the data to diagnostic and treatment information, and building an artificial intelligence (AI)-powered doctor assistance app to provide the physician with diagnostic support in real-time. AI and machine learning increasingly will be embedded into everyday things such as appliances, speakers and hospital equipment. This phenomenon is closely aligned with the emergence of conversational systems, the expansion of the IoT into a digital mesh and the trend toward digital twins.

### INTELLIGENT

AI and machine learning have reached a critical tipping point and will increasingly augment and extend virtually every technology enabled service, thing or application. Creating intelligent systems that learn, adapt and potentially act autonomously rather than simply execute predefined instructions is primary battleground for technology vendors through at least 2020.

### AI & Advanced Machine Learning

AI and machine learning (ML), which include technologies such as deep learning, neural networks and natural-language processing, can also encompass more advanced systems that understand, learn, predict, adapt and potentially operate autonomously. Systems can learn and change future behavior, leading to the creation of more intelligent devices and programs. The combination of extensive parallel processing power, advanced algorithms and massive data sets to feed the algorithms has unleashed this new era. In banking, you could use AI and machine-learning techniques to model current real-time transactions, as well as predictive models of transactions based on their likelihood of being fraudulent. Organizations seeking to drive digital innovation with this trend should evaluate a number of business scenarios in which AI and machine learning could drive clear and specific business value and consider experimenting with one or two high-impact scenarios. At some online publications, financial summaries and sports recaps are written by artificial intelligence (AI), not humans. In the medical field, thanks to “computer-assisted diagnosis,” a computer was able to spot 52% of breast cancers based on mammography scans up to one year before the women were officially diagnosed. In some organizations, AI decides which sales opportunities are worthy of a Salesperson's time.

**By**

***M.KIFAYATH RAJA- Final Year***

