Department of Computer Science & Engineering

OUR VISION

Creating eminent and ethical leaders in the domain of Computational Sciences through quality professional education with a focus on holistic learning and excellence.

OUR MISSION

♦ To create technically competent and ethically conscious graduates in the field of Computer Science and Engineering by encouraging holistic learning and excellence.

♦ To prepare students for careers in Industry, Academia and the Government.

♦ To instill Entrepreneurial Orientation and research motivation among the students of the department.

♦ To emerge as a leader in education in the region by encouraging teaching, learning, industry and societal connect.

PROGRAMME OUTCOMES (POS)

Students in the programme at the time of their graduation are in possession of:

a) An ability to apply knowledge of mathematics, computing, science and engineering.

b) An ability to design and conduct experiments, as well as to analyze and interpret data.

c) An ability to design and construct a hardware and software system, component, or process to meet desired needs, within realistic constraints.

d) An ability to function on multi-disciplinary teams.

e) An ability to identify, formulate, and solve engineering problems.

f) An understanding of professional, social and ethical responsibility.

g) An ability to communicate effectively.

h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.

i) A recognition of the need for and an ability to engage in life-long learning.

j) A knowledge of contemporary issues.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

♦ The graduates shall have sound knowledge of Mathematics, Science, Engineering and Management to be able to offer practical software and hardware solutions for the problems of industry and society at large.

♦ The graduates shall be able to establish themselves as practicing professionals, researchers or Entrepreneurs in computer science or allied areas and shall also be able to pursue higher education in reputed institutes.

♦ The graduates shall be able to communicate effectively and work in multidisciplinary teams with team spirit demonstrating value driven and ethical leadership.

ACHIEVEMENTS

Ms. Divya M Menon, Associate Professor (CS) secured Session Best Paper Award in the 4th International Conference on Computer, Control and Communication Technologies (CCCT-17) held at Kuala Lumpur (Malaysia) for her paper titled **"A secure Deep Belief Network Architecture for Intrusion Detection in Smart Grid Home Area Network"**.

Ms. Ninu Francis and Ms. Reshma K V attended 3 day short term training programme on **Research Methodology** at JECC .

Fr. Dr. A K George gave a seminar on **"The Ultimate Operating System"** at **John Mathai Centre, Aranattukara**, Thrissur as part of their college day celebrations on 05 Feb 2017

Ms. Ninu Francis and Ms. Reshma K V, Asst Profs in CSE completed a MOOC course in Python titled **"Programming for Everybody",** administered by University of Michigan.

Prof. M T Rajappan Pillai participated in the workshop on **Approval Process 2017-18** conducted by AICTE at Cochin University of Science and Technology, Kochi on 5th February 2017.

Asst Prof. Jyothis T S, coordinator for M. Tech-CSE attended cluster meeting at NSS college of Engineering, Palakkad.

Fr. Dr. A K George has delivered a talk on "**Principles of programming**" for UG students in CSE Department of Thejus Engineering College .

Fr. Dr. A K George appointed as a basket ball trainer of Game BB training at **Chavara School Adilabad** from 10th April 2017 to 13th April 2017.

Fr. Dr. A K George and **Dr C K Raju** represented JECC for the inter disciplinary research meeting organized by **Jubilee Mission Hospital and Research Centre**, Thrissur on 01st April 2017.

Mr. Alfin Lawrence,Ms. Agna Bastin,Ms. Anna Joby,Mr.Deen Shifas got special prize for Project Contest category in KSCTE funded project under the guidance of Ms. Sobha Xavier

Mr. Amal Prem K P of S4 CSE A, **Mr. Vishnu Prasad C** of S4 CSE B attended a State level workshop of **GENSIS(Gender Quality Through National Service Intervention Scheme** at GEC Kannur

A M Abhishekh of S4 CSE A , **Vishnu K** and **Tina Thomas** of S4 CSE B attended **FabXL**-Worksop by fab lab and Startup Mission at St. Joseph College.

Sam Varghese Mathew of S4 CSE B secured fourth prize in Start-up i3.

A M Abhishekh of S4 CSE A certified in Startup India Learning program

Surya R, Tina Thomas, Reshma, Nicy Joseph K, Sruthy S of S4 CSE B got Academic Excellence award from Jyothi Engineering college.

Abhishek Achuthankutty, Anirudh Rajan V, Anand A M, Arun Nair, Jijith S Nair of S4 CSE A participated in **"Building artificial intelligence units with RUST"** at Rajagiri School of Engg.& Technology.

"The computing scientist's main challenge is not to get confused by the complexities of his own making."
— **Edsger W. Dijkstra**

Congratulations!

CSE Department and CESA congratulated Calicut university rank holders Ms. Soorya M of CSE and Ms. Mariya Flower Wilson of IT 2011-15 batch on the college day

ACTIVITIES

Department of Computer Science & Engineering of Jyothi Engineering College in association with CSI organized a two day FDP on **"Design Thinking"** on 30th and 31st January 2017.

Prof. Francis George delivered a talk on **"Career Growth in Information Technology"** for S6 and S8 students.

Asthra Jyothi'17 Finals held on 13th January 2017.

Fr Dr A K George joined Department of CSE on 24th January 2017. Fr. Dr. A K George had completed his B Tech with honours from GEC Thrissur, M Tech and PhD from Anna University. Fr. A K George's PhD work was supervised by former President, Dr A P J Abdul Kalam.

Under the **"Invited Lecture Series"**, **Prof S Rathish, Professor and Head, Department of Civil Engineering** delivered a seminar on **"An Introduction to Water Quality Management"** on 17 Feb 2017.

<u>**Farewell:**</u> Staff and pre final year students of CSE Department arranged a farewell function for the final year BTech students. Staff and pre final year MTech students of CSE Department arranged a farewell function for the final year MTech students as well.

<u>**Workshops:**</u>

A workshop on **"Innovations in teaching programming languages"** was given by Fr Dr A K George, for the PG students on 24/03/2017 under the banner of CESA and CSI.

A workshop on **"Programming in Python"** was given by **Dr. C K Raju, Ms. Ninu Francis and Ms. Reshma K V** for S6 students under the banner of CESA and IEI.

QUIZ BYTE

Q1.) Which is the first fully supported 64 bit operating system?

Q2.) In which year '@' sign was first chosen for its use in e-mail address?

A1) Linux   A2) 1972

Answers:

ACHIEVEMENTS

Paper Presentations:

Delila Joseph, Jesna V J, Gentle Sam of S8 CSE A published **"Virtual World Using Virtual Reality"** in International Journal of Advances in Computer Science and Technology.

Anumol, Daze Thomas of S8 CSE A published **"Vrycle- A Virtual Reality Experience"** in International Journal of Advanced Research in Computer Science and Software Engineering under the guidance of Ninu Francis.

Albin Vince1, Arnold Tom of S8 CSE A published **"COMPARATIVE STUDY OF VEHICLESPEED CONTROLLING SYSTEMS"** in International Journal of Advanced Research (IJAR) under the guidance of Shaiju Paul .

Anagha Paulson, Aleena Seby & Agna Bastian of S8 CSE A published **"ADAPATIVE SPEED CONTROLLING SYSTEM"** in International Research Journal of Engineering and Technology (IRJET)

Aparna Mohan and Dilsha Hyderali of S8 CSE A published **"SECURED ONLINE PAYMENT SYSTEM-A REVIEW ON VARIOUS TECHNIQUES"** in International Journal of Advanced Research (IJAR) under the guidance of Swapna B Sasi

Aaditya Anil, Arjun T A, Harry John of S8 CSE A published **"Secured Online Payment System"** in International Research Journal of Engineering and Technology (IRJET)) under the guidance of Swapna B Sasi

Anjali C and **Giya Antony** of S8 CSE A published "**AUTONOMOUS EYE**" in International Journal of Advanced Research (IJAR)) under the guidance of Ms. Reshma K.V.

Anna Joby, Annmariya James.P and Freceena Francis of S8 CSE A published "**PATIENT MONITORING SYSTEM USING RASPBERRY PI-A REVIEW"** in International Journal of Advanced Research (IJAR) .

Aiswarya Paulson, Abee Joe Varghese , DeenShifaz of S8 CSE A published **"ATM FOR VISUALLY CHALLENGED PEOPLE"** in International Research Journal of Engineering and Technology (IRJET) under the guidance of Aneesh Chandran.

Jishma Jackson, Jincy K Wilson of S8 CSE A published **"Wearable Security Gadgets for Women Related Studies"** in International Journal of Advanced Trends in Computer Science and Engineering under the guidance of Diana Davis
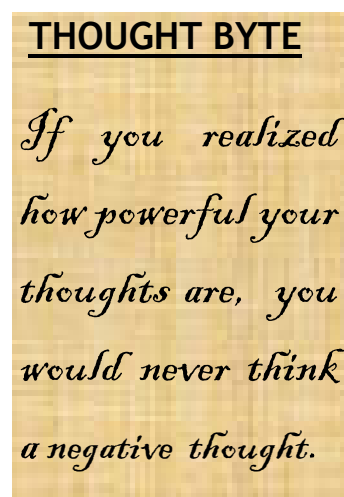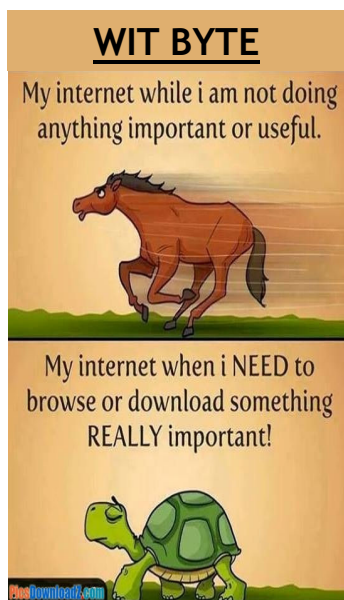
Sona S, Ruksana T M, Jithin Joy C, Sujan P K of S8 CSE B presented paper entitled **"AugTran : Augmented Reality Translator"** in the International conference on Innovations in information, Embedded and communication system 2017(ICIIECS'17).

Christy Robert and Dhanya P Iyer of S8 CSE A published **"A SURVEY ON ATM FOR VISUALLY CHALLENGED PEOPLE."** in International Journal of Advanced Research (IJAR).

C Midhundas, George Antony of S8 CSE A published **"Patient Monitoring System Using Raspberry PI"** in International Journal of Science and Research (IJSR) under the guidance of Ms.Seenia Francis.

Abhishek Achuthankutty of S4 CSE A ,**Vishnu K and Tina Thomas** of S4 CSE B participated in **Vibhavana Paper presentaion contest**-Jyothi Engineering college.

Ms. Jisna P J of S2 MTech CSE presented **"Early Glaucoma detection using Cup to Disc Ratio"** under the guidance of **Ms. Aswathy Wilson** in 29th **All Kerala Science Congress** held at Mar Thoma College Thiruvalla.

ACHIEVEMENTS

Ms. Lakshmi S of S8 CSE B got placement in **Adrenalin, CSS Corp & Speridian Technologies**.

Ms Adithya Anil (S8 CSE A), and **Ms. Sanjana Vinod** (S8 CSE B) were placed at **CSS Corp**.

Ms. Anna Joby of S8 CSE A, **Mr. Roy Davis**, **Ms. Sanjana Vinod**, **Mr. Sevier Tom**, **Ms. Sona S**, **Ms. Swathi K Sukumaran** of S8 CSE B got placement in **Speridian Technologies** .

Paper Presentations .. :

Ms. Aswathy A K of S2 MTech CSE presented a poster on **"Interactive Image and Text Extraction using ACP cut & CRF "** under the guidance of **Ms. Diana Davis** in 29th All Kerala Science Congress held at Mar Thoma College Thiruvalla.

Haritha R B of S4 MTech presented the paper titled **"A PREDICTIVE TRUST BASED SOCIAL IOT ARCHITECTURE FOR SMART HOMES"** in 6th IEEE international conference on communication and signal processing at **Adhiparasakthi Engineering College**, Melmaruvathur on 7th April 2017 under the guidance of Divya M Menon.

Jithin Dev of S4 MTech presented the paper titled **"AN INDEPENDENT FEATURE BASED REAL-TIME VIDEO ANOMALY DETECTION SYSTEM"** in 6th IEEE international conference on communication and signal processing at **Adhiparasakthi Engineering College**, Melmaruvathur on 7th April 2017 under the guidance of Unnikrishnan P.

Neethu K S of S4 MTech presented the paper titled **"AN INCREMENTAL SEMI-SUPERVISED APPROACH FOR VISUAL DOMAIN ADAPTATION"** in 6th IEEE international conference on communication and signal processing at **Adhiparasakthi Engineering College**, Melmaruvathur on 7th April 2017 under the guidance of Dany Varghese .

Reshma K R of S4 MTech presented the paper titled **"A DEEP NEURAL NETWORK MODEL FOR ATTACK IDENTIFICATION IN WIFI NETWORKS"** in 6th IEEE international conference on communication and signal processing at Adhiparasakthi Engineering College, Melmaruvathur on 7th April 2017 under the guidance of Jyothis T S.

Roshmy George of S4 MTech presented the paper titled **"IDEAL FONT TO BE USED IN TRAFFIC SIGN BOARD"** in 6th IEEE international conference on communication and signal processing at Adhiparasakthi Engineering College, Melmaruvathur on 7th April 2017 under the guidance of C K Raju.

Susan Shaju of S4 MTech presented the paper titled **"HAAR WAVELET TRANSFORM BASED HISTOGRAM CONCATINATION MODEL FOR FINGER PRINT SPOOFING DETECTION"** in 6th IEEE international conference on communication and signal processing at **Adhiparasakthi Engineering College**, Melmaruvathur on 7th April 2017 under the guidance of Diana Davis.

Remarkable Projects:

Lipin Pius, Chris Davis, Leon Jose and Philip Roy, from S6 CSE have succeeded in developing a real-time Linux kernel for their smart-phone Lenovo Vibe K5 from Android-based sources.

The project works titled **"Crime Reporting System"** done by **Ms. Sreelakshmi & her team** of Computer Science & Engineering got selected for the **KiTS Innovibes 2017**, Kottayam Institute of Technology & Science Innovation Centre.

The project work titled **"Virtual Reality Campus For Handicapped Persons"** done by **ALFIN LAWRENCE, DELILA JOSEPH, GENTLESAM WILSON, JERIN KJ, JESNA.V.J** of S8 CSE A got shortlisted in 6th CSI InApp National Student Project Awards 2017 .

The project work titled **"RAKSHA PENDANT"** done by **Jishma Jackson,Divya Andrews, Akash Thomas, Jesni Tomy, Jincy K Wilson** of S8 CSE A got shortlisted in 6th CSI InApp National Student Project Awards 2017

The project work titled **"LOW COST SECURITY ALERT IMPLEMENTATION"** done by **Jayakrishnan A, Hashlin P Jose, Arun J P, Jini John T, Athira C** of S8 CSE A got shortlisted in 6th CSI InApp National Student Project Awards 2017.

ACHIEVEMENTS

Ms. Fraceena Francis of S8 CSE A and **Mr. Renjith M** of S8 CSE B qualified in GATE 2017.

Delma Davis, Jilu G Vadakoot, Arun Nair of S4 CSE A got third prize in Tech Hunt at Jyothi Engineering College.

Divya Konikkara, Abin Mathew Wilson, Anand A M, Anirudh Rajan V of S4 CSE A got third prize in Hack Masters at Jyothi Engineering College .

F Ajaz, Asna Nesry of S4 CSE A got second prize in Hack Masters at Jyothi Engineering College .

F Ajaz of S4 CSE A , **Nivedya K**, **Shiby Francic**, **Rizana Faizal**, **Sruthy S**, **Laya K Joy**, **Pretty Paul** of S4 CSE B participated in **Science Quiz** at Jyothi Engineering College.

Mr. Vishnu K, Mr. Noel Vincent of S4 CSE B participated in 36hr **Smart India Hackthon** at College of Engineering Pune on 1st and 2nd April 2017 .

Vishnu K, Noel Vincent , Surya of S4 CSE B got 2nd prize and selected in final round of **iBETO** (Innovations of better Tomorrow) at KSUM Kalamassery .

MOOC Courses:

Fifteen students of S2 CSE B completed a MOOC course on **"Introduction to Drones"**.

 All S4 students of CSE completed a MOOC course on **"Introduction to Computer Science"** administered by **Stanford University**.

Out of the Box :

Aatmaj Janardanan and team got 2nd **prize** on fusion dance at **St. Alphonse College.**

Mr. Deen Shifaz of S8 CSE A and team composed and edited a Tamil album song at **Tharang '17**.

TECH BYTE

DDOS

DDOS stands for **Distributed Denial of Service**.

The U.K.'s National Crime Agency (NCA) says that DDOS attacks take place when a group of "compromised, controlled computers" send messages to another computer or server simultaneously.

The messages are sent involuntarily – that is to say without the consent of the computer's owner – the NCA adds. DDOS attacks are malicious and can make websites slow down and crash, making them inaccessible to users.