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COMPUTER SCIENCE & ENGINEERING

Vision

■ To become a center of knowledge in information technology, inspiring young professionals into becoming updated, innovative contributors to society.

Mission

- To foster a curiosity driven approach towards learning, making creative use of knowledge resources.
- To provide value based insights towards moulding technocrats with social commitment and leadership.





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Federal Institute of Science And Technology (FISAT)

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ICEFOSS'16

ICEFOSS' 16, a two-day National Conference on Free and Open Source Software was conducted at Federal Institute of Science And Technology on 19th and 20th August 2016. This is for the fifth time that the FISAT Free Software Cell, one of the most active student cell of FISAT is organizing ICEFOSS to uphold the spirit and virtue of Free and Open Source Software. Dr. Achuth Sanker Nair, Director, Quality Assurance and Head of Computational Biology & Bioinformatics at State Inter University Centre of Excellence in Bioinformatics, University of Kerala inaugurated the conference and workshop.

ICEFOSS is a recursive acronym of "ICEFOSS" Is Conference of Enthusiasts in FOSS". The FISAT Free Software Cell (FFSC),

established in 2006, is dedicated to promote computer users' rights to use, study, copy, modify, and redistribute computer programs. FISAT Free Software Cell have regularly conducted evening classes in the Linux operating system, kernel programming and Web application development to nurture the software related skills of FISATians.

ICEFOSS hosted 3 Extra mural lectures, 4 Hands on sessions/ Workshop and a exhibition of mini-projects by CSE students. More than 200 external delegates registered and benefited from these programmes. Mr. Jestin Joy, Asst. Professor and Ms. Reshmi R Asst. Professor, CSE Dept coordinated the programmes.



ICEFOSS '16 inauguration Dr. Achuth Sanker Nair



ICEFOSS-Keynote Address by Dr.Achuth Sanker Nair



Hands on introduction to the Rust Programming Language by Pramod WOEkshop on Go Programming by Johny James





Fueling and defending free and Open Internet- contribution pathways with Mozilla by Anivar Aravind

Understanding the text rendering in your computer By Santhosh Thottingal



Tensor Flow Workshop by Mahesh C



Workshop on *Machine learning* with *R* by Dr.Sunil T T & Shibu V



Project Exhibition by CSE Students





TCS Codevita

Sports are a great way of bringing out character of a person. A spectrum of emotions ranging from hope to despair, monotony to excitement, boring to interesting, mediocre to extraordinary performance are seen in every sport known to mankind. The purpose of sports apart from physical and mental fitness is to evoke these feelings in individuals. TCS feels strongly about promoting the culture of Programming-As-A-Sport. TCS CodeVita, a programming competition, is TCS way of attracting young impressionable college students to adopt this culture and experience joy of programming.

TCS codevita have successfully completed 4 seasons and the CodeVita envelope expanded from

- ~27K registrations in Season 1 to ~198K registrations in Season 4
- 1 country in Season 1 to 18 countries in Season 4
- 4 supported languages in Season 1 to 10 supported languages in Season 4

The main objective of Season 4 contest held on 7th August 2015 was to sharpen the contestants' programming skills through some real-life computing practices. Through this contest TCS also aimed to

- Spot the bright students
- Provide students an opportunity to showcase their programming talent and earn peer recognition and honour
- Provide an opportunity to showcase offerings of TCS to the academic world

CodeVita is a team contest with 2 members in a team and comprise of 3 rounds of coding. Our final year students VishnuPriya NR(2012 admission), Vishnu VV(2012 Admission) and Heera Mahesh, Jyojith Thaliath, Rithika S, Shilpa Jay, Soorya Mohan, Ashima Monsy, Sanjay Mohan, Jilu Saji, Keerthana N, K J Gopika, Nadish Shajahan, Sarath S, Neenu Shaji and Karthika Reshma Rajan have made it to the top 1000 teams!!!

As a token of appreciation, these students were exempted from the online test of TCS recruitment process and directly appeared for the interview during the campus process. They were exempted from the verbal section of the online test too. This is a great achievement and CSE Department congratulate all the winners of CodeVita. Kudose to all.

Messages



Mr Paul Mundadan Chairman, Governing Body FISAT

'Quality is not an act, its a habit' - Aristotle

Quality is the result of nonpareil hard-work and commitment to any endeavour. Department of CSE at FISAT stands at the pinnacle of this notion, with their persistent and eternal progress towards excellence.

Computer Science Department, in association with THYRA CSE Association, is once again conglomerating their activities and achievements through ICON 2016. I congratulate all staffs and students of the department for their stupendous work.



Dr. George Issac Principal, FISAT

In its many walks of regimes, CSE department has brought flying colors and laurels to FISAT. Be it in university results, placements, technical innovations and what not. Department of CSE is committed to provide wholesome education to students, presenting them with a judicious blend of our ancient wisdom and the rapidly changing technologies. In this auspicious occasion of unleashing of ICON 2016, I extend my heartfelt wishes and congratulations to the entire CSE Team for their commendable work.

CONGRATULATIONS!!!

FISAT M.Tech Computer Science & Information System Students secured Top Ranks in M.G. University Examinations last year and made us proud. Congragulations Sreelakshmi and Gayatri for the outstanding performace.





Ms Gayatri Soman



Dr. K S M Panicker Director (Academics)

Over the years, Computer Science Department has been in the forefront for upraising the bench mark of quality education at FISAT. They procure exuberant success, in all their endeavours, setting up hallmark for the batches yet to come. Meticulous planning, and skillful execution of highly determined faculty and students, proves time and again, that hardwork and determination never pays less.

I hope that ICON 2016 will live up to its expectation and spread the plethora of optimism.







Dr. Prasad J CProfessor & Head
CSE Dept.

HOD'S Desk

Dear students, parents and colleagues,

I hope, we will get the benefit of hardwork and good academic results, that we have gained consistently during the last 14 years, through the accreditation activities of NAAC, this year. Even though our institution is not under the category of government college, we have attracted many students with very good entrance rank and reached the top position of most sought after self financing college in Kerala. As Kerala Technological University Pro Vice Chancellor Prof. Abdul Rahiman said, "FISAT is a role model institution for all engineering colleges in India in both private and public sector". I take this opportunity to congratulate our dedicated students and faculty for their great effort in this institution. We are thankful to our Management team who started FISAT with the great vision to serve public by providing quality education to our Nation.

Success is the result of continuous hardwork with right attitude. Facilities provided in CSE Department through NPTEL Learning Centre, FISAT Free Software Cell, Computer Society of India, Web Development Cell, Student Association-Thyra, ACM student chapter, IEEE student branch, etc give enormous opportunity for our students for the development of co-curricular activities. I request the full participation of all students with these cells without affecting their academics, so that we can gain exposure in other dimensions also to nurture our technical skills and personality.

Last three years placement statistics across Kerala says that 95% of placement happened in IT field alone. Dear students, if we work consistently we will get a decent job in any one of the MNCs after your graduation. Our nation is becoming the largest country in the world with high youth population. Let us work together to convert the dream of Digital India in to a reality without forgetting the human values.

I take this opportunity to congratulate the Editorial Team for their untiring effort to publish the 7th edition department newsletter - ICON.

All the best



Jyothish K John Asst. Professor Senior Grade

EDITORIAL NOTE

"It is quality rather than quantity that matters." - Lucius Annaeus Seneca, philosopher Greetings!!!

The Department of Computer Science is coming out with its 7th Edition of Annual news letter. ICON has been a repository that records, and a gallery that showcases activities of CSE Department. FISAT has been a center of excellence in academic activities. But are we gaining enough from our curriculum? Co-curricular activities like technical workshops and expert talks have a great impact on students who try to achieve knowledge on updated tools and technologies.

I would like to point out a few challenges faced by the job market as the world's political scenario has undergone a transition.

"Britain's labour market went into "freefall" last month according to recruiters, which have reported the sharpest drop in permanent job placements since 2009"- says Financial Times - August 5, 2016. In the context of 'BREXIT', this points to probable localisation of work which was otherwise outsourced

Another closely watched upon scenario is the US senate elections. If republicans gain in elections, the policies of localization will probably on its higher side. This will adversely affect the job market especially the software industry. This does not mean the ship would sink but those with higher motivation and competitiveness will definitely sail safe to the shore.

The localisation policies started in Gulf countries has already affected a number of employees. The growth of international terrorism and decline of crude oil prices has become a huge blow to their economies. But the reports say that skilled employees sustain. But there is no situation to panic. All we have to do is to equip ourselves to become quality engineers. Use the various opportunities available in the duration of studies to gain an extra edge that adapt you to the highly demanding needs of job market.

The APJ Abdul Kalam University (KTU) has started taking measures to build a practice of quality engineering education which is falsely interpreted as anti-student policies. But the fact is that these policies will really enable the engineering students in Kerala to take up challenges and come out as quality engineers who will sail safely to the shores in spite of all present global challenges.

All the best









CSE @ NAUTILUS 2016

Nautilus - 16 was a two day inter collegiate Techfest, in which all departments of FISAT conglomerated their working. Department of CSE excelled with their uniqueness in selection of programs and accomplishments of them.

Various Programs conducted by CSE department are

Qwikipedia

Qwikipedia was an interesting game that relive the race for quest. The objective is to get a particular wiki page starting from a specific article using minimum time. There is no single correct answer, so participants might surprise ourselves by finding new routes each time. Given a wikipedia page, participants will be asked to navigate to another Wikipedia page just by clicking links in the page. Navigating to external domains rather than wikipedia.com is not allowed. Also use of keyboards and search bars are also not allowed.

Hackathought

Coding and Debugging Contest.

90s café

90s cafe offered a golden chance to revisit the funky gaming arcade of the 90s and play the classics like Mario, Street Fighter, Virtual Cop 2 etc, in authentic arcade environment surrounded by retro lightening and arcade machines.

Enigma

Coding Competetion















Digital Warfare

A war game with games like Dota 2, FIFA, Counter strike & Mini militiac etc.

Project Exhibition

Projects of Final year B Tech Computer Science students were exhibited in the auditorium and was open for external viewership. Around 20 projects, fully developed in house, by students of CSE department, were exhibited before both college level and school students. The event received much appreciation. Best two projects were selected and awards were distributed. Dr Abdul rahiman, Pro VC of KTU also visited the exhibition and rated it with A grade.



Seminar on Cyber Forensics

A one day seminar on Cyber Forensics was arranged for students of FISAT on 8/4/2016, as part of the Techfest. The resource person was Mr Midhun Mohan MG, Cyber Forensics Trainer at Resource Center for Cyber Forensics (RCCF) CDAC Trivandrum. The seminar was attended by around 25 students of CSE department.

Laser Show

A darkroom with laser lightings. It was a game to cross the darkroom without touching those laser beams.

3D show

Motive behind the 3D show was to exhibit how computer science plays a vital role in the emerging technologies of todays world. It consisted of constructing a room that exhibits all the versions of android, the cloud computing, parts of computer, different types of peripherals, big data and many other essential technologies. A short 3D film was played; 3D glasses were given to watch the short video. The show was organized in a room which could accommodate around 20 people at a time. There were fixed timings for the show. Every person entering the three dimensional room was given a view of all the structures and a proper explanation about the contributions of computer science in the world today.





MoU with ICT Academy Renewed







FISAT has renewed the MoU with ICT Academy after the successful tenure of one year contract of activities between FISAT and ICT Academy on 22nd March 2016. The objective of Memorandum of Understanding with ICT Academy of Kerala is to improve the employability skills of the trainees (both Faculty and Students), Assessments and Certifications developed by ICTAK. This will be achieved through resources, regular workshops, training programs, capacity building, faculty development and Career Guidance & Placement Unit alignment. Under this MoU, the ICTAK will ensure timely completion of training assessment and certification. ICT Academy is an initiative of Govt. of Kerala for the benefit of students in the Higher Education Sector.



During the MoU period last year, we have conducted the following programmes

- Three day faculty development program in 'Concepts coaching'.
- Fecilitated free Oracle Academy membership for the college.
- Students Orientation program for first year students.
- Organised a program in association with ICT Academy in Infopark to provide opportunity for meritorious students to interact with Industry leaders.
- Organised Oracle training in DBMS for faculty members.

BEST TWO MTECH PROJECTS

The following projects were selected as the best M Tech projects for the last academic year.



AN IMPROVED CONTENT AWARE PHOTO COLLAGE BASED ON LOCP ALGORITHM By Sreelakshmi S

Photo collage is a method to summarizing and exhibiting collection of photos. From the geometric point of view, the generation of collage is considered as a region partition problem such that each image is displayed in its corresponding region partitioned from the canvas. The core of this is an efficient power-diagram-based locally optimized circle packing (LOCP) algorithm that arranges a series of circles assigned to input photos compactly in the canvas. To favor important photos, the circles are associated with image priority determined by an image ranking process. With the new formulation, each factor influencing the state of a photo is optimized in an independent stage, and computation of the optimal states for neighboring photos are completely decoupled. This improves the scalability of collage results and ensures their diversity. It also devises a co-saliency/saliency-based image fusion scheme to generate seamless composite collage. Co-saliency based method will help to create the collage with common salient objects from group of images, can generate the collages on non-rectangular canvases and supports interactive collage.



SECURE DIGITAL IMAGE SHARING USING DIVERSE IMAGE MEDIA By Gayatri Soman

Visual Secret Sharing (VSS), one of the secret communication technologies, aims to share a secret image with several participants by a dealer. The secret images are hidden in shares that are either printed on transparencies or are encoded and stored in a digital form in conventional visual secret sharing. The shares can appear as noise-like pixels or as meaningful shares, which arouse suspicion and increases transmission risk interception. Hence this VSS schemes suffer from transmission problem both for the secret and the participants. The proposed (n, n) - NVSS scheme uses (n-1) selected natural images (natural shares) and one noise-like share to share one digital secret image. The natural shares can be photos or hand-painted pictures in digital form or in printed form. The noise-like share is generated from these natural shares and the secret image. The transmission risk is very less since the natural shares are unaltered, diverse and innocuous. Also proposed an efficient way to hide the noise-like share to reduce the transmission risk problem for the share.







ACM Student Chapter Launched



An ACM Student chapter was started by Dept of Computer Science & Engineering, at FISAT and was inaugurated by Dr. G Santhosh Kumar, Associate Professor, CUSAT on 22nd March 2016. It aims to serve as a gateway to forums, panel discussions, and symposia that further aids student's professional development. Preparation and presentation of technical reports and papers and cooperative efforts on research projects also allows students to test their technical expertise on relevant fields. ACM Student chapter at FISAT is currently functioning with guidance and support from Mr Mahesh C, Mr Jestin Joy and Ms Sruthy Suresh, Assistant Professors of Dept of Computer Science & Engineering.

ACM, the world's largest educational and scientific computing society, delivers resources that advance computing as a science and as a profession. ACM provides the computing field's premier Digital Library and serves its members and the computing profession with leading edge publications, conferences and career resources. ACM India has been led in its brief but impressive tenure by individuals who have made their marks in advancing computing as a science and profession.

ACM' Professional and Student chapters worldwide serve as hubs of activity for ACM members and the computing community at large. They provide seminars, lectures, learning forums and networking opportunities with peers and experts across the computing spectrum.





Mr.Jestin Joy, Asst. Professor & ACM Co-ordinator of FISAT met with Edward A Feigenbaum, Turing award winner and Father of Expert Systems during the ACM Annual Event 2016. He is pretty confident that Al (Artificial Intelligence) will take centre stage in people's lives by 2020. He was also of the view that Google could try its autonomous car in India considering the driving conditions

YEARWISE TOPPERS

S1 + S2 (First Year)



Gopika Ajit CS-A 1st Rank



Binil Kuruvilla J 2nd Rank



Saaiida S 3rd Rank



Alfi Naseer CS-A 4th Rank



Jisy Jose CS-A 1st Rank



Saumva Shenov CS-B 2nd Rank



Akhila S Babu CS-A 3rd Rank



Sreelakshmi C CS-B 4th Rank

S3 (Second Year)



Divya Jose T CS-A 1st Rank



Vandana M N CS-B 2nd Rank



Anju Maria CS-A 3rd Rank



Akash P Manoj CS-A 4th Rank



S8 (Fourth Year)

Prinu P Varghese Josmi Mariya CS-B 1st Rank



CS-A 2nd Rank



Anjali V S CS-A 3rd Rank



Jeena Sebastian CS-A 4th Rank





BEST B.TECH FINAL YEAR PROJECTS

Castle Defence:

WebGL Based Online Game with adaptive AI







Sherfin S

Vishnu Priya N R

Vishnu V G

Castle Defence is a multiplayer 3D Game based on WebGL technology done by Sherfin S, Vishnu VG, Vishnupriya N R. The objective of the game is simple: Hordes of enemies are attacking the tower, the players must defend the tower from the enemies till the timer runs. The main feature of the game is that, the hordes of approaching enemies are controlled by an adaptive Al algorithm which learns to be more effective as the game progresses. The game implementation sports latest HTML5 technology called 'WebGL'. This makes it possible for any person to play the game directly from his/her web browser, rather than downloading or installing any software. The multiplayer support for the game is implemented using NodeJS backend system supported by a schema-less database system called MongoDB. The entire communication system of the game relies on JSON based endpoints, the client-side and server-side are both implemented in Javascript, making it an entirely javascript based system.

GO Game Using Reinforcement Learning







Anjali Tomy

Anjali V S

Anshad M K

GO is a board game for two players that originated in China more than 2,500 years ago. The two players alternately place black and white playing pieces, called stones & quot on the vacant intersections (called & quot; points & quot;) of a grid of 19 x19 lines (beginners often play on smaller 9 x 9 and 13 x 13 boards). The objective of the game is to use one's stones to surround a larger total area of the board than the opponent. This project uses Q-learning a model-free reinforcement learning technique. It works by learning an action-value function that ultimately gives the expected utility of taking a given action in a given state and following the optimal policy thereafter. A policy is a rule that the agent follows in selecting actions, given the state it is in. The optimal policy can be constructed by simply selecting the action with the highest value in each state. One of the strengths of Qlearning is that it is able to compare the expected utility of the available actions without requiring a model of the environment. Additionally, Q-learning can handle problems with stochastic transitions and rewards, without requiring any adaptations.

Talk By Dr. John Jose



A highly motivative and inspirational talk was taken for the faculty of FISAT by Dr John Jose, Assistant Professor, Department of Computer Science & Engineering, IIT Guwahati on 15th Dec. 2015. He started by mentioning the difference between doing a PG and research. He talked about the need for keeping in touch

with latest technologies by reading journals and accessing information over the web and other universities. He also insisted that staff should visit the library every day. He suggested that vast reading is required irrespective of the area of interest and once we have selected our area, then we have to refer the previous paper by the indexed journals. He also insisted to publish papers.

Digital India Week



FISAT Summer School Programme



Computer Science Department organised a summer school programme for B.Tech students from 1st July 2015 to 10th July 2015 during the semester break. The objective of this programme was to give exposure to few leading technologies which are used by Industries. Resource persons from Industries of Oracle, Profoundis, TCS, Myntra and Resource Person from the Research Team of DRDO interacted with students. Senior Passout students and CSE Faculty members also handled various sessions of the summer school programme. Students from S5 CSE A and B batch attended the sessions. The program was coordinated by Dr. Sreeraj M and Jestin Joy.

Details of the programme is as given below.

Talks

Learn, Graduate, Conquer Arunanand TA, Oracle

Introduction to the corporate world Joffin Joseph, Profoundis

Overview of BigData and Internet of Things (IoT) *Viju Chacko, TCS*

How to crack GATE



Workshops

Lua	Powerful, fast, lightweight, embeddab scripting language with many industri applications	
Web Stack	How to develop web applications	
Computer Science with Python	A Python based introduction to Computer Science	
PyQt	Cross platform GUI development	
Image Processing	Image processing with Python	
Introduction to Java - Industry perspective	Introduction to java from industrial perspective	
Android application development	Introduction to Android application development	
Gift	Software revision control system used for projects like Linux Kernel	















List of Resource Persons for FISAT CSE Summer School Programme

- Vinu Paul (Scientist E, DRDO)
- Mobin Skariya (Senior Software Engineer, IBS)
- Sreejith J (Solution Architect, IBS)
- Yedhu Krishnan (Product Developer, Multunus)
- Jerry John Jacob (Product Developer, Multunus)
- Midhun K (Product Developer, Multunus)
- Vinay John (Software Developer, Rapid Value)
- Kevin Christie (Software Developer, AlignMinds Technologies)
- Dheeraj Ram (MTech Student, IISc Bangalore)
- Arunand TA (Member Technical Staff, Oracle)
- Nimish Joseph (Member Technical Staff, Oracle)
- Sreehari Mohan (Test Automation Engineer, Myntra)
- Meera Chandran (Software Developer, Mdrift)
- Bobinson K B (Founder and CEO, Agileblaze Technologies)
- Viju Chacko (Technical Architect, TCS)
- Reeja George (Academic Relationship Manager, TCS)
- Jofin Joseph (COO, Profoundis)
- Mahesh C (FISAT)
- Dr Sreeraj M (FISAT)
- Jestin Joy (FISAT)
- Pankajkumar G (FISAT)

Some of the feedback from students about FISAT CSE Summer School Programme:



"Academically the programme laid a foundation to certain topics that we may face in future. I think I have gained more personally especially regarding the IT industry and what profession I would choose."

"Academically I was able to learn new programming languages and I have planned to learn more.
Personally I became more specific on what to do after B.Tech."

Of the 87 students who gave feedback 82 said the program was helpful for them. On a scale of 1-5, with 5 being best, students gave the program a score of 3.6.





Day to Remember

"Day to Remember" 3" edition was held on19th Sept at Aeli Hills, Aluva. The scintillating performance by FISATians for the differently abled students of special schools, in and around Aluva was a memorable one. The day of fun and entertainment was organized by NSS members of FISAT in association with Stallions International, an NGO working among children. Thirty five NSS volunteers under the leadership of Mr. Jiby Varghese, Asst. Professor, Mr. Tom, Asst. Professor and Mr. Jacob Peter, PRM engaged the children with dance, music, games, workshops and group activities. Around hundred special children and twenty five regular students in the age group of five and fifteen, along with their family members and Stallions volunteers participated in the day long programme.

The programme was inaugurated by Mr. Paul Mundadan, Chairman, FISAT Governing body. Mr. E A Aboo Baker, Mr. M P Abdul Nazer, Dr. KSM Panicker and Dr. George Issac spoke on the occasion.



Industrial Visit

The Industrial Visit for the Vth Semester B. Tech., Computer Science and Engineering students was conducted to The Doddabetta Tea Factory, Udhagamandalam, Tamil Nadu from 19th January, 2016 to 21st January, 2016. The visit was both fun filled and informative. The Doddabetta Tea Factory is situated on the Doddabetta Hills, one of the high hills surrounding the City of Ooty, away from the traveller crowds and crowned by the native foggy cap. The employees explained the features of their factory, the tea plants, the machinery and the processes they use. The students were given first hand training on the process of manufacturing tea from the tea leaves from start to finish. An employee was assigned to explain the things to the students. The students received information about the process of withering, crushing, cutting / tearing / curling (CTC), shaping, fermentation, drying, cleaning, and grading. The process of tea manufacture in the factory was partly automated. The students were interested in knowing the control systems that automated the processes. They were also provided with the information about the history of tea and tea manufacturing. The second session at the factory was an introduction to the process of making chocolates. The students were able to learn how the handmade chocolates were manufactured. The students were given an opportunity to taste a specially made tea from the very own tea packets from the factory. They could also buy chocolates and tea packets. The visit ended with a photo session at the factory. They also visited places of importance in Ooty like the Botanical Garden which helped the students to freshen up, easing the tension due to their hectic syllabus related activities.





Industrial Visit to Government Sandalwood Oil Factory, Karnataka by S5 students



django & Python WORKSHOP



django girls

Django is a high-level Python Web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of much of the hassle of Web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source. We in FISAT always stood for Open Software and Open source development and so welcomed the idea proposed by two of our student representatives of Mozilla Club - FISAT, to conduct a workshop on Django under the banner of Django Girls, which is a non-profit organization that empowers and helps women to organize free, one-day programming workshops by providing tools, resources and support.

The Workshop was held on 1/02/2016 with mentor Mr. Rahul Ramesh and student coordinators Gopika K J and Krishna Venu. The workshop turned to be a huge success and will set a milestone for students to further carry project works in this area.







Gopika K J



Winners of THYRA Quiz

First Prize



Farhan Nadish

Second Prize







Nithin Jose

Python workshop for faculty based on KTU syllabus

CSE Department conducted python workshop for college faculty on 8th July 2015. 56 faculty from 23 engineering colleges participated in the event. The objective of the workshop was the orientation of faculty members with the new syllabus of the python course - Problem Solving and Computer Programming(CS 101-05) in the first semester under Kerala Technological University. Mr. Mahesh C and Mr. Pankaj Kumar were the resource persons for the workshop.

Workshop for CSE Faculty on 'Transactional Analysis'

A workshop on Transactional Analysis was conducted for the CSE Faculty on 24th February 2016. Sri. Prakash Chandy, Chief Administrative Officer and Famous Transaction Analysis Resource person conducted classes for CSE Faculty. The session was a new experience for the participants.

An album of Students Projects Released





The Center for High Performance Computing has published an Album of Students Projects from the year 2010 to 2015 on 22nd March 2016. The High Performance Computing facilities at CSE department, along with expert and committed faculties help students with diversified choices on projects. Principal Dr.George Issac released the student Project Album document. It is a matter of pride to say that the excellence of

academic projects accomplished by students, is a substratal reason for their campus placements in multinational companies. We hope that the release of this Album will be an important record in the history of the CSE Department.

Congratulations!



Anand J

Mr Anand J of S7 CS A batch has been selected as the campus ambassador of HackerEarth. HackerEarth is a Bangalore based start-up that hire programmers through technical challenges. It is a network of top developers across the world. Congratulations Anand!







A team of final year students from Federal Institute of Science and Technology (FISAT), Angamaly, Albert Jose M, Ajayson VS and Krishna Venu won the prize for the 'Most Innovative Solution' in the Kerala Road Safety Hackathon conducted by the Kerala Road Safety Authority in association with the World Bank and Group of Tech Companies(GTC), the industry body of IT companies. The State Road Safety Commissioner, Mrs. Srilekha IPS awarded them with a prize money of Rs 1.9 lakhs, sponsored by AXA Data Innovation Labs. These students are a part of the Centre of High Performance Computing at FISAT mentored by Mr. Mahesh C.

The team made a proposal for a new system named "Bon Voyage" which means 'have a good journey'. The current system only fines the drivers for their mistakes. No appreciations is given for the good drivers. There exists a penalty point system - which gives black points to drivers. The credit point system - gives credit to drivers. The system implements a prototype web application that provides the credit based scoring system for drivers. The users can log in with a life time unique identity like license number and a password. "Our app aims to motivate the people to drive safe" said Krishna, who is a computer science student. The user can log in before starting a journey. The ride will be analysed and points will be credited into the user's account accordingly. The credit is given to the users based on their safe driving practices. "Our idea is that the government can give gift vouchers (online shopping gift coupons, mobile recharge coupons) or tax benefits or insurance premiums, etc when users redeem their points" said Albert, a computer science student. The drivers are divided into various levels based on their credit points,

higher the level the user is in, better the benefits they get. "We are looking forward to implementing safe driving without imposing it on people" said Ajayson, an electronics student.

Further proposals on the system:

- Award the people with highest credit points in a region with special prizes from the Motor Vehicle department.
- Make a Facebook page to portrait best drivers. This can inspire people to drive better.
- Credit points for the people who save the lives of people caught in accidents - by connecting to Hospitals - This would grow a helping nature in people.

About the application: BonVoyage

BonVoyage is a simple 'Web Application' prototype that can be accessed from any mobile/computers with an internet connection. It is designed using the Python-Flask framework and uses MySQL database. The users can log into the webapp and check the status of credit points, redeem them. The BonVoyage also provides a feature to display the route from a location to another in the web app. 'Google Maps API' has been used to display maps in the app. The idea behind this feature is to give the user a map, analyse the speed of the user in the transit, and check if the user has obeyed the speed limit criteria. If yes, award him credits - according to the kilometers he travelled.







Congratulations! Arun P and Aravind Murali for making it into the 1st elite batch of Startup Box Program 2015

Arun P and Aravind Murali, final year CSE students were selected in the Federal Bank assisted Start up programme by startup Village on 4th August 2015. They had been selected for the 1st edition of Startup Box 2015. The teams were selected based on the collective ratings by the Interview panel, which consisted of Sanjay Vijayakumar, Chairman-Startup Village, Vishnu Gopal, CTO- MobME Wireless, Satya Kalyanasundaram, CFO-MobME Wireless, Gautham, COO-Startup Village and Manoj Krishnan, Program Director-Startup Box.







Aravind Murali

Kerala Road Safety Hackathon

The Kerala Road Safety hackathon is a partnership initiative between the World Bank, IFC and AXA, in association with the Kerala Road Safety Authority and Department of Information Technology, supported by Angel Hack and Gtech.

150 talented developers from all over India gathered for the event. Participants had 24 hours to build working technology and create solutions pertaining to road safety. They had to create concepts for software or hardware-based program/applications for the '4 Es' of Road Safety ie: Engineering, Enforcement, Education and Emergency Care Management (Post-Crash Management).



START UP

What our Students from StartUp say

"We. Adam Shamsudeen, Jibin K Mathew, Eldho Kurian, Jiss Raphel, Ananthakrishnan M.A., a team consisting of 5 members got selected into the second batch of the startup village program for first-time founders. The selection process contained a series of coding tests and interviews, in which we competed with 5000+ students from all over India hailing from prestigious institutions such as IITs, NITs, BITS etc. Out of 1000+ teams that applied, we were the only team to get into this program from Kerala and one among the 8 teams from all over India. We got 100% scholarship for this program worth ₹100000. These scholarships were purely based on the performance in the selection procedure. This program aims to teach us to build a great startup right from college. First 6 months they'll help us to select an idea, develop the product and to market it. After these 6 months, we will get graduated from sv.co and they will continue to support us for the next 5 years.

To view our time line please visit https://www.sv.co/startups/clubdin.

3 out of 8 teams have dropped out of this program as they couldn't take the heat. We are currently developing our first product "Clubdin". Clubdin is a club/association management software which aims at reducing the effort required to manage a club/association. Now we are in the prototyping stage and we have successfully launched our prototype version 1.0. Prototype version 2.0 with added features requested by clubs and associations is under development and will be launched soon.

To view the product Deck please visit www.Slideshare.com/Adamshamsud een/clubdin To view clubdin web site please visit www.clubdin.com Do visit our website www.mindhack.co.in "



Online Assessment Test

An online process for the free assessment of the aptitude was conducted by ICT Academy of Kerala for all final semester students of FISAT. Students who participated in the process got a self assessment mark. Our institution can plan the further enrichment programme for students based on this performance.



Idea Pitching Session in the CSE Department

The department of computer science conducted an idea pitching session in order to identify and promote young future entrepreneurs. This was a platform to enable students to prepare themselves to get connected to all the players in the ecosystem-from Angel Networks to Venture Capital firms, Accelerators, Enterprises and Industry Bodies. This initiative was taken up by the college recognizing the fact that more than 90 percentage of the startups have failed. The CSE department is planned to give an exclusive opportunity for the selected students to work with industry experts, to attend courses, and avail financial support from the college or external agencies.

Bridge Course in C

CSE department conducted a one month bridge course on C programming for S2 students during their semester break. Course covered the entire syllabus of Computer programming in C. The course was scheduled with theory sessions in the morning & lab practicals in the afternoon. At the end of course students were evaluated and certificates were issued.



One Day Workshop on OpenGL



One day workshop for faculty on OpenGL was organised on 25th January, 2016. Mahesh C, Asst. Professor, CSE Dept led the workshop. Open Graphics Library (OpenGL) is a cross-language, cross-platform application programming interface (API) for rendering 2D and 3D vector graphics. The API is typically used to interact with a Graphics Processing Unit (GPU), to achieve hardware - accelerated rendering. The topics discussed include GLUT, Open GL geometric drawing primitives, Animations, Lights, Shading, Textures, Introduction to OpenAL, etc.

ICON 6th Volume Released



CSE Dept Newsletter - ICON 6^{th} Volume Released by Sri.Bose P I, Treasurer, FISAT on 24^{th} July 2015.

Special congrats to Pankajkumar & Jithesh V

FISAT admission process has been digitized completely by including online payment system from this year onwards. Admission ranklist preparation was an automated process already. Special congratulations to CSE Faculty Mr. Pankajkumar and System Administrator Mr. Jithesh for their efforts in digitizing the admission process.





Pankajkumar

Jithesh V





Named after the past president of IEEE Computer society, Sir Richard E Merwin, this award is considered as one of the highest awards given away by the IEEE Computer society in recognition of outstanding volunteering in IEEE and IEEE Computer society. A maximum of 40 scholarships, each of \$1000 is given to selected student members across the globe. The benefits of this scholarships, includes two year complementary membership and an amount of \$1000 given in two cycles, the October cycle and April cycle.

Mr. Anand J, student of seventh semester B.Tech Computer Science & Engineering received the Richard E Merwin scholarships in the April Cycle. He is one among the 4 students who have received the award from Kerala section, one among the 14 scholarships received in India Council and one among the 18 students who received it globally. He is the second Richard E Merwin scholar from FISAT, the first one being received by Ms. Vishakha Khona in 2013.





ICTAK Techathlon

Winners of Event Participants		
Team A Winners	Team B Winners	Team C Winners
Akhila CSE	Adam S CSE	Neenu Shaji CSE
Amrutha KS CSE	Deepak G CSE	Nadeen S3 CE
Sruthi Regi EC	Sreelakshmi S Menon	Uvaiz S3 EEE
Riya EC	EEE	Sneha S3 CE
Anju Muraly EEE		Varsha S3 EEE



Congratulations Krishnanand V

Congratulations Krishnanand V for the successfully completed and received a passing grade through online courses of from International Universities.

The list of Course Successfully Completed by Krishnanad are



Creative Problem Solving & Decision Making



Internet Emerging Technologies



Big Data, Cloud Computing & CDN Emerging Technologies



Fundamentals of Management



Internet of Things & Augmented Reality Emerging



Effective Problem-Solving & Decision-Making



DEV202.2x: Building Cloud Apps with Microsoft Azure



CS001x: MyCS: Computer Science for Beginners



Design and Development of Games for Learning



Framing - Creating powerful political messages



Introduction to Office 365 APIs



Work Smarter, Not Harder: Time Management for Personal & Professional Productivity





Web Hackthon & Workshop by Thyra

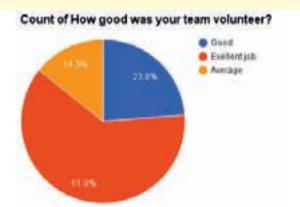
CREATING Reagonaine Webaitea USING BOOTSTRAP

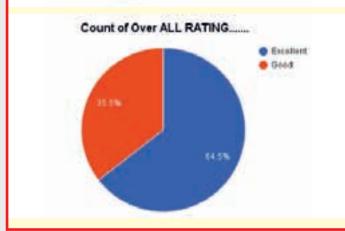


A workshop and Hackathon was organised by the student Association THYRA on 10th March 2016. The objective was to create dynamic website using Bootstrap technology. The classes were lead by S. Vaisakh and M. Farhan of S6 B. Tech CSE.



Feedback about the Hackathon and Workshop conducted by Thyra:





A special talk on 'Human Values'

A session by Dr.Suseela Mathew, Associate Professor(Retd), Department of Psychiatry, Trivandrum Medical College was conducted for the students of the CSE Department on 17th March 2016, Thursday for S4 and S6 students in the forenoon and afternoon session respectively. It was an eye opening session for many FISATians. Chief Administrative officer Sri.Prakash Chandy took initiative to conduct this programme. The session could be cansidered as one of the best session on value education class, that was given to the CSE students.

Advisory Committee members of CSE Dept.

The Advisory Committee is expected to explore all possibilities and give suggestions for improving the academic quality of B.Tech and M.Tech Computer Science Courses. A meeting of the Advisory Committee was held on March 22, 2016.

- Dr. George Issac Principal, FISAT
- Mr. Hasum Jacob Head of Artificial Intelligence, TCS Cochin(Industry Expert)
- Dr. G.Santhoshkumar G
 CSE Dept, CUSAT, Cochin. (Academic Expert)
- 4. Mr. Veeraraghavan Head, Knowledge Offce, ICT Academy, Kerala.
- 5. Reuben Philip Abraham CEO, Reubro International (IIPC member)
- 6. Dr. KSM Panicker Director, Academics, FISAT
- 8. Dr. C.Sheela Vice Principal, FISAT
- Dr. Sunny Kuriakose Dean, Student Affairs, FISAT
- Dr. Prasad J C
 Head of CSE Dept, FISAT
- 11. Dr. Arun Kumar Senior Faculty, FISAT
- Ms. Divya John Senior Faculty, FISAT
- Mr. Mahesh C
 Senior Faculty, FISAT
- Mr. Rijo Jose Luis Principal Software Engineer, Visual IQ(CSE Alumni)
- Ms. Chethna Joy Asst.Prof, CSE Dept, FISAT (CSE Alumni)



Farewell Meetings

Farewell meeting of M.Tech 2013-15 was conducted on 5th August 2015 and that of B.Tech CSE was conducted on April 6th 2015. Mr. Albert Jose was identified as the best outgoing student of 2012-16 batch during the farewell meeting. A cerificate and memento was given to Mr. Albert Jose.





Student Achievements

- Mr.Vinayak G Krishnan secured the 1st position in Rajan Memorial light music solo [Male] held as part of Ragam'16 conducted by the National Institute of Technology Calicut from 1st to 3rd April 2016.
- 2. Mr.Vinayak G Krishnan secured 2nd position in classical music held as part of Ragam'16 conducted by the National Institute of Technology Calicut from 1st to 3rd April 2016.
- 3. Reshma S Shenoy of S8 semester was selected for Vishwa Konkani Student Scholarship Fund.
- 4. Noel Sam acquired First for Band of Brahma in Brahma 2016 held on 18th, 19th and 20th February2016 at Adi Shankara Institute of Engg. and Technology, Kalady.
- VP Vishnuprasad, Vidhunived,VK Anandakrishnan acquired 2nd for Crack the lock in Brahma 2016 held on 18th, 19th and 20th February 2016 at Adi Shankara Institute of Engg. & Technology, Kalady.
- 6. Neenu Shaji was declared the winner in SLDC Tech Quiz competition held at FISAT, Angamaly on October 17th 2015
- S Vaisakh and Mohammed Farhan acquired the 1st position for Web Reconstruction in ASWAMEDHA 2015 conducted in association with SAMPARK, held on 3rd October 2015 at Adi Shankara Institute of Engg. and Technology
- 8. Harshini S Rao acquired the 1st position for Paper presentation in ASWAMEDHA 2015 conducted in association with SAMPARK, held on 3rd October 2015 at Adi Shankara Institute of Engg. and Technology.
- Nidhisha V acquired the 1st position for Code Debugging in ASWAMEDHA 2015 conducted in association with SAMPARK, held on 3rd October 2015 at Adi Shankara Institute of Engg and Technology.
- Adam acquired the 2nd position for Code Debugging in ASWAMEDHA 2015 conducted in association with SAMPARK, held on 3rd October 2015 at Adi Shankara Institute of Engg and Technology.
- 11. Mohammed Farhan KN and S Vaisakh won the 1st prize in WEB DOODLE in connection with Palmarius 2015 organized by Sahrdaya College of Engineering and Technology, Kodakara, Thrissur on 5th October 2015.
- Vinayak G Krishnan had been selected in the preliminary for the next phase of AIR Music Competition, All India Radio on 14th August 2015
- 13. Sagar Jose of S2 CSE student won district level prize for 'speak Kerala' to identify the best youth of the state.

Details of GATE 2016 Qualified Students



Jini Francis S8 CSE A Score : 493 Marks : 37.71



Lakshmipriya N.J S8 CSE B Score: 463 Marks: 35.09



Althaf Saifudeen S8 CSE A Score: 412 Marks: 30.49



Albert Jose M S8 CSE A Score: 408 Marks: 30.16



Mirzana Abdul Hukh S8 CSE B Score: 393 Marks: 28.85



Reshma K Menon S8 CSE B Score : 389 Marks : 28.52



Krishna Venu S8 CSE A Score: 382 Marks: 27.82



Ansu Sabu S8 CSE A Score: 374 Marks: 27.11



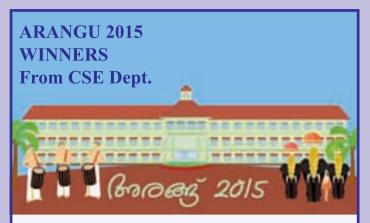
Anjaly Tomy S8 CSE A Score : 364 Marks : 26.23



Equipping students for Placements - Empower Programme for Second Year CSE Students.







Classical Music (Vocal Male)

1st Prize

Vinayak G Krishnan S8CSB

Light Music (Male)

2nd Prize

Vinayak G Krishnan S8CSB

Western Vocal Solo

3rd Prize

Sneha S Warrier S8CSB

Bharathanatyam

1st Prize

Sreelakshmi C secsb

Other Forms of Dance

2nd Prize

Sreelakshmi C secsa

Film Review

3rd Prize

Akshav Aiith s4csa

Poetry Writing- English

2nd Prize

Lavanya Sree sacsa

English Short Story

1st Prize

Lavanya Sree sacsa

2nd Prize

Ananthu S Nair s4csA

Recitation English

2nd Prize

Amy Rose Antony S4CSA

Debate 3rd Prize

Krishnanand V, Rahul Arun S6CSB

Folk Dance

1st Prize

Sreelakshmi C secsb

Nadan Pattu

1st Prize Reshma K Menon sacsa Split Screen 2nd Prize

Lakshmipriya N J, Reshma Shenoy (S8 CSB), Anju Augustine, Dhillu Paul (S6 CSA)

3rd Prize

Eliena Jose s4 csA

Short Drama

1st Prize

Arun Rajan s4 csa

2nd Prize

Lakshmipriya N J, Lavanyasree S,

Mridula, Meera George

(S8 CSB), Michelle Mariya, Reshma

K Menon, Nighitha Kuriachan

Group Dance (Male)

3rd Prize

Arun Anand & Team S4 CSA

Beat it

1st Prize

Abel Diaz s4 csa, Noel Joseph Sam

M s4 csb

Ouiz

3rd Prize

Aravind G Menon, Christy Rose Michael (S6 CSA), Deepak G Anil

Group Dance (Female)

1st Prize

Rithika Rajan & Team S4 CSB

2nd Prize

Anju Augustine, Dhillu Paul s6 csA

3rd Prize

Negi Babu, Sumayya E A, Vani Venugopal S4 CSB, Sreelakshmi Sajan, Meghna Peethambaran

Group Song (Indian)

1st Prize

Reshma R Shenov, Vinavak G Krishnan, Ritu Ann Jaison 88 CSB, Lakshmipriya N J, Reshma K Menon, Aravind G s8 csa

Details of events attended as resource person

Pankaj Kumar G

- Workshop on "R Programming" organized by MCA, FISAT held from 13/07/2015 to 14/07/2016
- Workshop on "High Performance computing" (22/06/2016) as a part of FPP on IoT organized by Dept. Of CSE, TocH held from 20/06/2016 to 24/06/2016
- Workshop on "Virtualization and Cloud computing" (15/07/ 2016,16/07/2016) as a part of FDP on Secure Cloud Computing organized by Dept. Of IT, TocH held from 13/07/ 2016 to 17/07/2016
- Workshop on "Introduction to AngularJS" as a part of FPP on Advanced Trends in WebTechnology organized by Dept. Of CSE, RSET held from 04/07/2016 to 15/07/2016
- Workshop on "High Performance computing "(15/03/ 2016,17/03/2016) as a part of FDP on High Performance Computing organized by Dept. Of Computer Applications, RIT kottavam held from 14/03/2016 to 18/03/2016
- 3 day Workshop on "Network Simulator" organized by School of Computer Science, MG University.

Mahesh C

- July 2015 Python programming . Viswajyothi
- Aug 2015 Introduction to Entrepreneurship MES
- Sep 2015 Parallel Programming University of Kerala
- Nov 2015 Information security FISAT
- Jan 2016 OpenGL FISAT
- Jan 2016 Latex FISAT

Dr. Prasad J C

- Reviewer member of GRD International Journal
- Invited Speaker for various seminars
- Advisory Board Member, RJCET, CSE Dept. Kakkanad

Mr. Jestin Joy

- Resource person for the LaTex on 6/1/2016 organized by Indian Society For Technical Education (ISTE).
- Resource person for Python programming at UKF College of Engineering and Technology.
- Invited talk on Natural language Processing organized by the Dept. of CSE, College of Engineering, Kidangoor on 22/4/2016.

Webinar on ENGINEERED-in-INDIA

ICT Academy of Kerala conducted webinar sessions for FISAT on ENGINEERED-in-INDIA on 10th February by Mr. Gopikrishnan. Students from different CSE Classes participated in the 2 hour session.







List of Faculty with 100% Result

B.Tech

- Nisha Rajeev (Operating Systems S5CSEB(2013Ad.year))
- Meera Treesa Mathews (Problem Solving & Computer Programming - S3CSEB(2014 Ad.year))
- Soumya S Raj (Advanced Networking Trends S8 CSE B (2012 Ad Yr))
- Lakshmi S (E Commerce S8 CSE A (2012 Ad Yr))

M.Tech Adm.Year (2014)

I Semester

- Advanced Data Structures Meenu Mathew
- Compiler Design Reshmi R
- Object Oriented Software Engineering Lino Murali
- Data Mining and Knowledge Discovery Dr. Arun Kumar M N
- Information Theory and coding Siyamol Chirakkarottu

II Semester

- Database Concepts Paul P Mathai
- Software Architecture Anurani P
- Algorithm Analysis Dr. Arun Kumar M N
- Parallel Algorithms Meenu Mathew
- Computer Vision Dr. Sreeraj

M.Tech Adm. Year (2015)

I Semester

- Advanced Data Structures Divya T V
- Operating System Design Hema Krishnan
- Computer System Design & Architecture Dr. Arun Kumar M N
- Data Mining Dr. Sreeraj

Faculty promoted as Assistant Professor (Special Grade)



Hansa J Thattil



Preethi N P



Nisha Rajeev



Dr. Prasad J C promoted as Professor & Head of CSE Dept.



Mr. Jithesh Promoted as System Administrator



Mr. Rajesh promoted as System Manager.

Achievements of CSE Faculty



Mahesh C 3rd Rank for M.Tech from Kerala University



Chethna C Joy 2nd rank for M.Tech from CUSAT



Meenu Mathew GATE qualified



Merin Cherian NET qualified





PC Assembling & OS Installation: One day Workshop

FISAT Computer Science Technical wing conducted a workshop to assemble computers and OS installation to our first year students on 27th Februry 2016. Sri. Bose P I, Treasure, FISAT inaugurated the session. Princiapal Dr.George Issac, Dr.K.S.M.Panicker, Dr.Sunny Kuriakose, Dr.C.Sheela and Dr.Prasad J C spoke on the occassion. Mr.Varun Lab Instructor and Deepak, Lab Instructor led the sessions.







Digital Library Check-In & Check-Out System

Hats off to the Programming Team Mr. Mathews E K, Ms. Simi Mohan and Mr. Pankajkumar for developing this superb system. It amplifies uniqueness of FISAT Library. It acts as a gate register for our library. Teachers can monitor students in the library through the intranet by means of this setup. Effective utilization of library hours by the students can also be ensured. Entry/Exit status of a particular duration can be easily extracted by this technique.

Digital Library Check-In & Check-Out System was inaugurated by Sri.Paul Mundadan, Chairman, Governing Body FISAT on 1st Dec. 2015 at Central Library. Function was presided over by Principal Dr. George Issac. Mr. Sino Varghese, Librarian delivered the welcome speech. Mr. P I Bose, Treasurer Governing Body FISAT, Adv. A Jayasankar, Media Critic, Dr. Muse Mary George renowned Poet,



Mr. Mathews E K



Mr. Pankajkumar



Ms.Simi Mohan

Smt. Molly Vincent, President of Mookkannoor Grama Panchayath, Sri. Elias K Tharian Member, Mookkannoor Grama Panchayath, Dr. A Sunny Kuriakose, Dean Student Affairs, Dr. KSM Panicker, Director Academics, Dr. K P Saraswathy Amma, HoDs, and staff members attended the function.

Congratulations



Mr. Jyothish K John, Asst. Prof. (Sr. Grade) receives Best Teacher Award of the year 2016





NPTEL Local Chapter Started in FISAT



NPTEL has accorded FISAT with the status of a Local Chapter thereby enabling FISAT with the facility to offer e-learning through online Web and Video courses in Engineering, Science and Humanities streams. Pro-Vice Chancellor of KTU Prof.Abdu Rahiman handed over the approval letter of NPTEL to Principal, FISAT for establishing Local Chapter in FISAT on 8th April 2016. FISAT provides NPTEL course for the academic growth of staff and students. It creates an academic environment. They can download the materials for future reference. The National Programme on Technology Enhanced Learning (NPTEL), a project funded by the Ministry of Human Resource Development (MHRD), provides e-learning through online Web and Video courses in Engineering, Sciences, Technology, Management and Humanities. This is a joint initiative by seven IITs and IISc Bangalore. The mission of NPTEL is to enhance the quality of engineering education in the country by providing free online courses.

NPTEL is a curriculum building exercise which is directed towards providing learning materials in Science and Engineering by adhering to the syllabi of All India Council for Technical Education and the slightly modified curricula of major affiliating Universities. It has developed curriculum based video courses and web-based e-courses targeting students and faculty of institutions offering UG engineering programs. NPTEL provides free online courseware in the form of web courses and video lectures. These lectures utilize a multitude of facilities of the video medium, such as chalk-and-talk, tablet writing, power point, two and three dimensional animations, interactive codes, etc. Each course comprises of approximately 40 video lectures of about 1 hour duration. An online discussion forum is incorporated wherein students can post and review questions. Wherever applicable, course assignments, handouts, self-evaluation tasks, etc. have been integrated. Workshops are routinely conducted for institutes, students, mentors, etc. under the auspices of NPTEL. Resmi R, Asst. Professor, CSE Dept. is the POC(Point of Contact) for NPTEL local chapter in FISAT.

Benefits to students

- ☑ Have access to 900+ courses of NPTEL view, download & cory
- Get information about upcoming courses.
- ☑ If a mentor is available, get help when required
- ☑ Be eligible for scholarship and avail DD payment
- ☑ Use college infrastructure for course access
- ☑ Be motivated by fellow students, group work

MoU with Rebrou & Project Discussion

As part of MoU with Rebrou, the CSE department faculty conducted several rounds of discussions to undertake the project work of Reubro International. Reubro gave placement offers to a few students of FISAT. Two domains of work associate with Reubro International include 'Data Analytics' and 'Game'.

MoU with BSNL

CSE students will have an opportunity to get as internship at BSNL Training division at subsidised rate. The department had an MoU with BSNL Ernakulam division, a few years back. Now the department is going to renew the MoU with BSNL once again. Suggestions are invited from all our stakeholders before entering the MoU activities.

Congratulations Mr. Mahesh, Asst.Professor, CSE Dept



In addition to the regular work, our CSE faculty member Mr.Mahesh has taken the following extra effort.

- 1. Guided 17 students to participate in road safety hackathon and 3 of the teams made it to final round. One team won the prize of 2 lakhs for best innovative project award.
- 2. HPC research group: 14 final year students were trained in electronics, High Performance Computing. These students were made capable of doing any research projects.
- 3. Big data research group: Selected 10 students from MCA and trained them in Big data, Machine learning and analytics.
- 4. Under Institute Institute partnership program, CHPC guided 7 students from the school of computer science to complete their master's dissertation.
- Institute Industry partnership program: Worked together with Tata Elxsi team to develop localization techniques for autonomous vehicles and presented the work in a SAE conference.
- University VPN Extension: This project is undertaken by the interest of Mahatma Gandhi University to extend the eresources available in the Library to the university study centers. It was executed successfully.
- Offered a short term course in LATEX for faculty of FISAT under ISTE.
- 8. Conducted a seminar on new generation processors for ECE dept.





Top Mini Projects of 3rd year students ADAPTIVE TALKING TOM

By Greeshma Babu, Amrutha KS, Akhila Susan Babu S7 CSE



The aim of this project is to develop a 3D character model inside a virtual environment that will mimic the gestures performed by user in real world. Character is developed using a software Blender. Blender is a professional, free and open-source 3D computer

graphics software product used for creating animated films, visual effects, 3D printed models, interactive 3D applications etc. Blender's features include 3D modeling, rigging and skinning, animating, rendering. The second phase consist of using Microsoft Kinect. Kinect is a line of motion sensing input devices by Microsoft for Xbox 360 and Xbox One video game consoles and Windows PCs. Based around a webcam-style add-on peripheral, it enables users to control and interact with their console computer without the need for a game controller, through a natural user interface using gestures and spoken commands.

For calibration, user is required to stand in front of Kinect with his whole body visible. Once calibration is done OpenNI/NITE will start tracking the user's skeleton. This skeleton information is then passed on to OSCeleton, another middleware component, who translates the skeletal joint information from NITE into OSC messages. An addon is developed so that these messages are changed into a required value set. Finally, these values are mapped into blender image to move the object in real time.

This project can further be modified by adding audios, a questionanswer conversation capability based on some parameters, and mimicking face movements in detail.

MEDIA BIAS MONITORING By BIAS







Mr. Kiran

Mr. Vaisakh

Newspapers nowadays turn news into advertisements, As a result people are forced to believe what they receive. The prominent News Sources which includes Malayala Manorama, Mathrubhumi provides the news updates to its users regularly. But the news articles they provide may not belong to a single category. Each article have portions of different streams. For eg: A Business article may also talk about sports. As a result it is difficult for the user to correctly identify which category it belongs to. py Bias allows us to

understand the real ideology by categorizing news articles from any smedia source. This has been an absolute way to classify a set of news articles into Business, Lifestyle, Politics and so on.

The objective of media bias monitoring is to understand the bias and analyze it to identify the trends on the media. This project implements a web based application which collects the data from news websites and analyze the bias towards various areas.

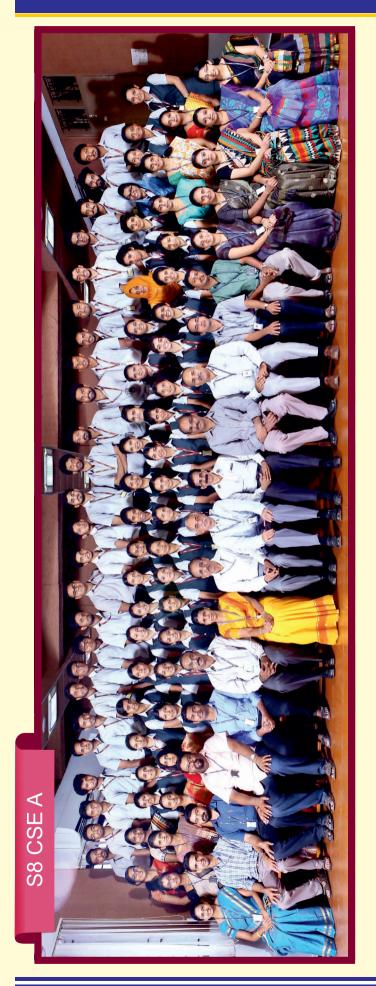
The project is built using python for back-end processing of the data and Django Framework for the front end User Interface. The K Nearest Neighbor Classifier Algorithm is the basis for identifying the category of an article.

The features of the system are:

- Inclusion of multiple News Website
- Ease of using the Application
- Single click Analysis with Pie Chart
- Comparison of bias of different news sources











Announcement of 5th International Conference on Advanced Computing And Communication Technologies For High Performance Applications - ACCTHPA 2016

Following the recent expansion of the field of parallel and distributed computing, ACCTHPA'16 aims to cover all current research endeavors in this field and to provide future directions to researchers and practitioners in the field of High Performance Computing, Image Processing, Computer Vision, Communication techniques etc. The conference has a history of attracting participation from reputed researchers from all over the world during ACCTHPA'08, ACCTHPA'10, ACCTHPA'12 and ACCPTHA'14. This is the 5th consecutive international conference with an acceptance rate of about 25% for all the previous conference editions.

Theme for this year conference is: "High performance computing-Parallel Algorithms".

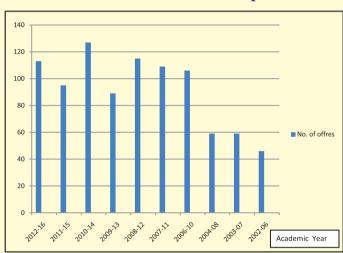
Conference Program includes:

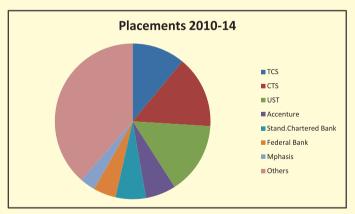
- Keynote Talks
- Paper Presentations
- Poster Presentations
- Workshops

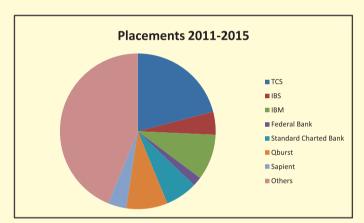
Important Dates

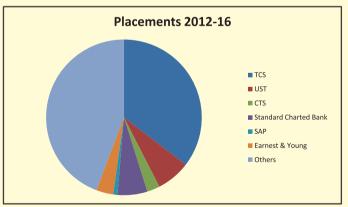
- Submission deadline: October 20, 2016
- Notification of Acceptance: November 20, 2016
- Author Registration: November 30, 2016
- Camera-ready deadline: December 5, 2016
- Conference Dates: December 14 16, 2016

Placement Statistics of CSE Department











Chief Editor Mr. Jyothish K John

Asst. Professor (SG)

Associate Editor Mr. Mathews E K

Computer Programmer

Associate Editor

Ms. Nisha Rajeev Asst. Professor



Ms. Merin Cherian Rahul Arun (S7 CSE B) Asst. Professor

Student Editors Soniya Johny (S5 CSE B) Mariet Sigy (S5 CSE B) Mahima Sarah M (S3 CSE B) Mehjebin Mujeeb (S3 CSE B) Aman Ashraf (S3 CSE A) Binil Joseph (S3 CSE A)

Dhillu Paul (S7 CSE A)