January, 2017

KUMARAGURU
college of technology
character is life

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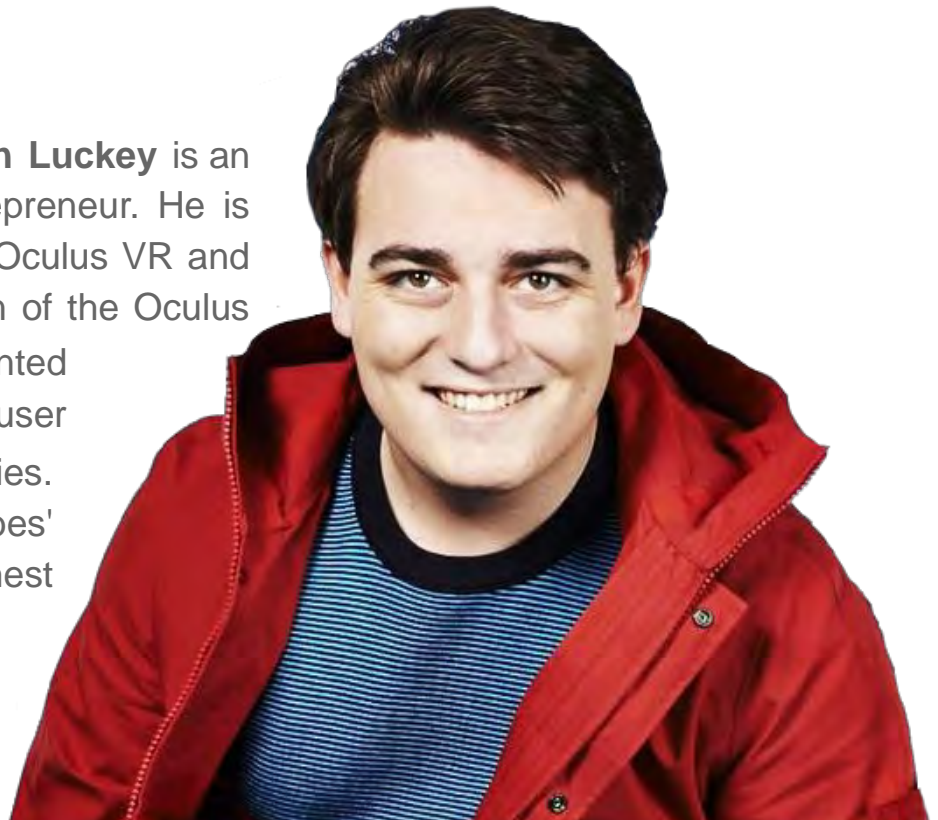S. Nandha Kumar, D. Gopinath,
H. Ibrahim Badhusha,
V. Priyanka, E. Srinidhi

Virtual reality (**VR**) typically refers to computer technologies that use software to generate realistic images, sounds and other sensations that replicate a real environment (or create an imaginary setting), and simulate a user's physical presence in this environment, by enabling the user to interact with this space and any objects depicted therein using specialized display screens or projectors and other devices. VR has been defined as "A realistic and immersive simulation of three dimensional environment, created using interactive software and hardware, and experienced or controlled by movement of the body" or as an "immersive, interactive experience generated by a computer". A person using virtual reality equipment is typically able to "look around" the artificial world, move about in it and interact with features or items that are depicted on a screen or in goggles. Virtual realities artificially create sensory experiences, which can include sight, touch, hearing, and, less commonly, smell. Most of this era's virtual realities are displayed either on a computer monitor, a projector screen, or with a virtual reality headset (also called head-mounted display or HMD). HMDs typically take the form of head-mounted goggles with a screen in front of the eyes. Some simulations include additional sensory information and provide sounds through speakers or headphones. Virtual Reality actually brings the user into the digital world by cutting off outside stimuli. In this way user is solely focusing on the digital content.

Palmer Freeman Luckey is an American entrepreneur. He is the founder of Oculus VR and designer of an early version of the Oculus Rift, a HD VR head-mounted display that provides the user with different virtual realities. Luckey ranks #26 on Forbes' 2015 list of America's richest entrepreneurs under 40.

Department Association Inauguration

Inauguration of CSE Department Association

CSE Department Association was formally inaugurated on September 20, 2016 by Mr. Deepak Senthil Kumar, Consulting Software Engineer, Lexis Nexis, UK. Dr. P. Devaki, HoD/CSE welcomed the gathering. The Chief Guest Mr. Deepak Senthil Kumar delivered the inaugural address and highlighted about Master Data Management which proved to be very useful. Mr. B Gokul Krishnan, Final year CSE co-ordinated the inauguration.

An icebreaking session was conducted during August 2016 to set the stage for student interaction. The Department Forum Meetings were conducted in July and December 2016, by the final year students for second and third year students to discuss about the preparation for placement interviews.

Mr. Deepak Senthil Kumar delivering the Inaugural Address

Workshops on Information Security, Codathon, Technical Treasure Hunt, Code Debugging, Technical Crossword, Technical Quiz, etc. are being planned to be organized as part of Yugam in February, 2017.
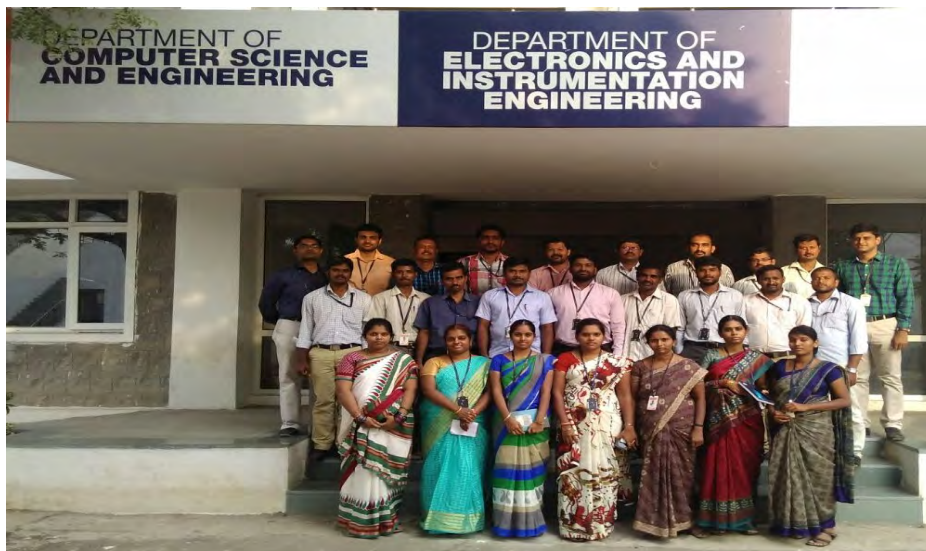
Department Events

Seminar on Cognitive and Cloud

The Department of Computer Science and Engineering organized a seminar on Cognitive and Cloud on October 6, 2016 from 3.25 PM to 4.35 PM in D-block seminar hall. Around 50 students from III CSE, III IT and II MCA attended the session. Ms. S. Rajini, ASP/CSE welcomed the gathering and introduced the Chief Guests. Mr. Lawrence Mohanraj, Country Leader, Academic Initiative from IBM delivered a lecture on the importance of Cloud system. Ms. Seema Kumar, Country Leader, Developer Ecosystem & Startups from IBM delivered a lecture on Cognitive and Cloud. The entire session was interactive and informative.

Workshop on Linux System Administration

Two days workshop on Linux System Administration for technical support staff was organized by Mr. S.P. Siddique Ibrahim, AP/CSE and Mr. G. Kanagaraj, AP/CSE at the Department of Computer Science and Engineering from November 28—29, 2016 to offer practical administration and configuration skills on Linux. The workshop covered strong hands-on exercises with Linux OS, explanations of Linux commands, security settings, user administration, file sharing between Linux platform and windows and vice versa and some real world examples. About 20 supporting staff from CSE, IT and MCA department attended the workshop and found it very useful.

Workshop on Linux System Administration for Technical support staff

Mega Workshops

Domain experts from CSE department organized a Mega Workshop on July 22, 2016, August 20, 2016, September 3 & 17, 2016 in the following thrust areas,

- Beginner Android Application Development
- Internet of Things
- Cloud Computing
- Machine Learning

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

PRESENTS

MEGA WORKSHOPS | 22 JUL 20 AUG 3, 17 SEPT 2016

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BEGINNER ANDROID APPLICATION DEVELOPMENT WORKSHOP APP DEV 1.0

"COME EXPLORE THE POSSIBILITIES OF ANDROID APP DEVELOPMENT"

THE MODULES ARE :
Overview of Android | Android basics | Setting up development environment | UI Basics
App Demo | Road map for future Android app development

INTERNET OF THINGS(IOT)

Internet of Things(IoT) refers to physical and virtual objects that have unique identities are connected to Internet to facilitate intelligent applications that make energy, logistics, industrial control, retail, agriculture and many other domains "smarter". IoT is a new revolution of the Internet that is rapidly gathering momentum, driven by the advancements in sensor networks, mobile devices, wireless communications, networking and cloud technologies. Experts forecast that by the year 2020 there will be a total of 50 billion devices/things connected to the Internet.

This workshop on "Internet of Things" is a Hands-on training programme with Arduino and Raspberry Pi boards. This workshop aims at project-based learning approach including applications of various peripherals on both of these hardware development boards. At the end of the workshop, the participants will be able to build IoT related applications on their own.

CLOUD COMPUTING

The Cloud computing market is growing rapidly, and the hype around it has transformed into reality. Many organizations and professionals are looking for a solution to build cloud competencies to properly manage, utilize and govern new technologies. Also the effect of Internet on business made it necessary for any business to move to cloud computing. Cloud computing helps to cut off the investment on heavy hardware & proprietary software, access data from any digital gazettes regardless of where you are, helps to develop your applications easily with operational excellence. This workshop is designed to help students to become cloud-enabled and plunge into the exciting career of cloud computing. Helps participants understand the fundamentals of cloud computing and deploying infrastructure as a service.

MACHINE LEARNING

Machine learning provides computers with the ability to learn without being explicitly programmed. It is the field that studies how to make computers learn. Today, business tasks like product recommendation, image tagging, sentiment analysis, churn prediction, fraud detection and lead scoring can only be achieved using machine learning. It is a first-class ticket to the most exciting careers in data analysis today. This is a workshop that enlightens the end-to-end process of investigating data through a machine learning lens. It covers topics such as extraction and identification of useful features that best represent data, a few of the most important machine learning algorithms and evaluation of their performance.

Industry Courses

One Credit Course

One Credit Course on "Interfacing in Health Care Systems" by Shristi Software and Applications Pvt. Ltd, Bangalore was organized by the Department of Computer Science and Engineering for 3 days from September 1-3, 2016 at KCT. Eighty six students from CSE and IT attended the course and were benefited.

One Credit Course on "Interfacing in Health Care Systems"

Certification Course

EMC - Data Science Associate International Certification course was organized by CSE Department in collaboration with EMC Corporation, Bengaluru. 150 students from various departments like CSE, IT, MCA and ECE registered for the course. The classes were conducted by internal faculty members trained by EMC's –"Train the Trainer Program".

EMC—Certification Course Training Session

Project Highlights

Microsoft Kinect Control Robotic Arm

Nithin Sundaraj (13BCS065), M. Praveen (13BCS072) and J. Udayasankar (13BCS108), from final year CSE are currently doing a project on Microsoft Kinect Control Robotic Arm funded by KCT Ré—a students' research platform. The project complements the advanced methodology of controlling machines using

Ré **incubating the project**

body gestures and is programmed using Microsoft@kinect SDK. It is highly effective towards controlling computers and other machines. A real time Robotic arm is constructed which will be controlled based on the instruction given to the Arduino by Kinect's gesture input. The resultant product will have vast industrial application and is mentored by Ms. S. J. Syed Ali Fathima, AP/CSE.

Inventory Management System

CSE department is a consultant for M/S Star Drives, Coimbatore through Ms. K. Saranya, AP/CSE. S. R. Naveen (13BCS221), V. Ragavi (13BCS077), T. M. Sri Subhashini (13BCS100), Vaishnavi Siranjeevi (13BCS112), R. Valarmathi (13BCS226) from final Year CSE are developing a software for Secure and Scalable Inventory Management System, which provides robust functionality for managing logistics. It helps to record and track materials based on both quantity and cost. It can significantly improve inventory turn, optimize the flow of goods, and shorten routes within the warehouse and distribution center. This software is designed to be user friendly. The project has modules to address the production, sales, purchase requirements and is designed with security and scalability. The project is guided by Mr. U. Thiruvaazhi, AP—III/CSE.

Faculty Acheivements

External Interaction

Ms. S. Uma Maheswari , Mr. V. Senthil Kumar , Ms. D. Yamunathangam and Ms. S. Nithya Roopa, conducted a workshop on "Interactive programming with Python—season I" at KCT from September 19-26, 2016.

Mr. S. P. Siddique Ibrahim, and Ms. S. Uma Maheswari, delivered a guest lecture on "Data   communication and networking" at Maharishi Vidya Mandir Senior Secondary School from November 19-22, 2016.

Ms. D. Aswini, delivered a guest lecture on "Boolean theory" at Maharishi Vidya Mandir Senior Secondary School on November 22, 2016.

Mr. S. P. Siddique Ibrahim, delivered a guest lecture on "R -programming and distance based models" at Kalasalingam University on December 9, 2016.

Research Publications

Mr. G. S. Nandakumar , Mr. S. Thangasamy , Ms. V. Geetha , "Automated Assessment of Knowledge and Skill Acquired by E-Learners through Adaptive Testing", The Online Journal of Distance Education and e-Learning, Vol: 04 , Issue: 4 , Oct 2016 , pp. 7-14.

Ms. R. Kalaiselvi , Dr. K. Kousalya , Ms. R. Varsha , Ms. M. Suganya. , "Proxy server for secure document retrieval in cloud computing", Asian Journal of Information Technology, Vol: 16, Issue: 15 , Nov 2016 , pp. 2937-2942.

Conference Presentations

Ms. S. J. Syed Ali Fathima, Mr. S. Shankar, "Augmented Reality using Natural User Interface Based Physical Therapy Rehabilitation Framework with Mobile Decision Support System ", 2nd International Conference on Computers and Management (ICCM 2016) , Rajasthan Technical University, Kota.

Sweet Memories

Marriage Function of Mr. V. Senthil Kumar, AP

Farewell Party to Mr. K. Sivan Arul Selvan, ASP and Ms. R. Kavitha, AP—SRG

Baby Shower function of Ms. P. Betty, AP

Best Wishes to our faculty!

Placement Record
2016 –2017 (2013 - 2017 Batch)

Department of CSE brings out an excellent placement record year by year. Out of 114 eligible students, 88 were placed within their mid-final year. Many students got triple and dual placements. We offer an intensive placement training to our students starting from second year to be placed in product as well as service based companies.

S.No.	Company Name	Student Name	No of students placed
1	Voonik Technologies [Product]	Felix Sundar M.	1
2	Zoho [Product]	Karthikeyan B. Senthil Vidhyakar S.	2
3	Robert Bosch [Product]	Ilakiya J. HemaPriya M. Nivetha P. Raghavi K.	4
4	Payoda Technologies [Product]	Balaskandan G.	1
5	Oneglobal Systems	Vaishnavi B.	2
6	OLOG	Malarvizhi S.	1
7	Yodlee	Revanth M.	1
8	CTS		
9	Wipro		61
10	Accenture		
11	Tech Mahindra		8
12	Revature	Reminaa	1
	Mindtree	Murali V. C.	1
13	Skava	Arun Prasanth	1
14	Amazon [Internship]	Felix Sundar M. Madhu Venkatesh	2
		Total	**88**

Hearty congratulations to all of our students!

Student Acheivements

Ponmahilarasu (15BCS006) and Naveen (15BCS006) have built a project on Trackr and was awarded the Second prize in Forge product hunt Hackathon. Trackr is an IoT based mobile application which benefits passengers who avail the college bus for their commute. The GPS module is used to get the GPS co-ordinates of the vehicle and transfer the data using GSM module. It is controlled by very hi-tech protocol called Web Sockets which shows the exact location of the vehicle in real time so that passengers can track their buses and go to their respective boarding points.

Sports Achievements

S. Rajeshwari (14BCS212) has participated in CATC-CUM-IGC-TSC held at James college of Engineering and Technology, Nagercoil from July 13-22,2016. She has also won the Second place in 400 meters relay, Half marathon and 1500 metres in Anna University Zonal Athletic Meet held at KCT from October 6-8, 2016.

B. Karthiga (14BCS204) was a part of the Kho-Kho team and won in KICS' 16 held at KCT from August 12-16,2016.

Vishnu Sriraj.T. V (15BCS100) attended Vagu Sainik Training Camp conducted by Air SQN NCC, Puducherry on September 14 & 15, 2016.

Congratulations! Let the Spirit Continue.

Students Corner

The Cardiac Talks

This wonderful life…seriously, isn't the phrase itself so impeccable and intriguing?...let me tell you, the wonderful in our wonderful life actually isn't full. It gets dreadfully nil and leaves us in wonder about what it actually meant …now I know that this is something which could make serious discussions, probably rendezvous with the person in you who is suffocated and buried deep into the layers of material happiness, the rat race the routine life which, instead of being run, runs us.

Now let me be frank, I haven't faced too much of any kind of crisis in my life, in fact I've been gifted with great parents and an exotic lifestyle. But sometimes, I seriously wonder when I see people buzzing and power walking, just one question pops out nowhere, which is "where is everyone heading to?"...Like I mean you're wearing a mask all day long running away from who you really are, lying to yourself and getting tensed up over something which you make seem, bothers you. No offence to the people who love their jobs and routine, this one's not for you. But, just let me know why?

You can never really question yourself, but this time you better do…why do you work in a brokerage firm when your passion was to sing? Why are you   managing a restaurant when all you wanted to do is to write?...why are you afraid to go behind what you want?...is it the family crisis? well, you've solved it but what about you? What happened now?...why are you still doing it… you're burying it deeper and deeper in you, this is not why god made you with this ability…you are running at a fast pace, but where are you heading to? Why don't you stop, take a break and a deep breath and start walking towards your heart, towards you, towards the person in you who, you truly believe can make you happy from the inside.
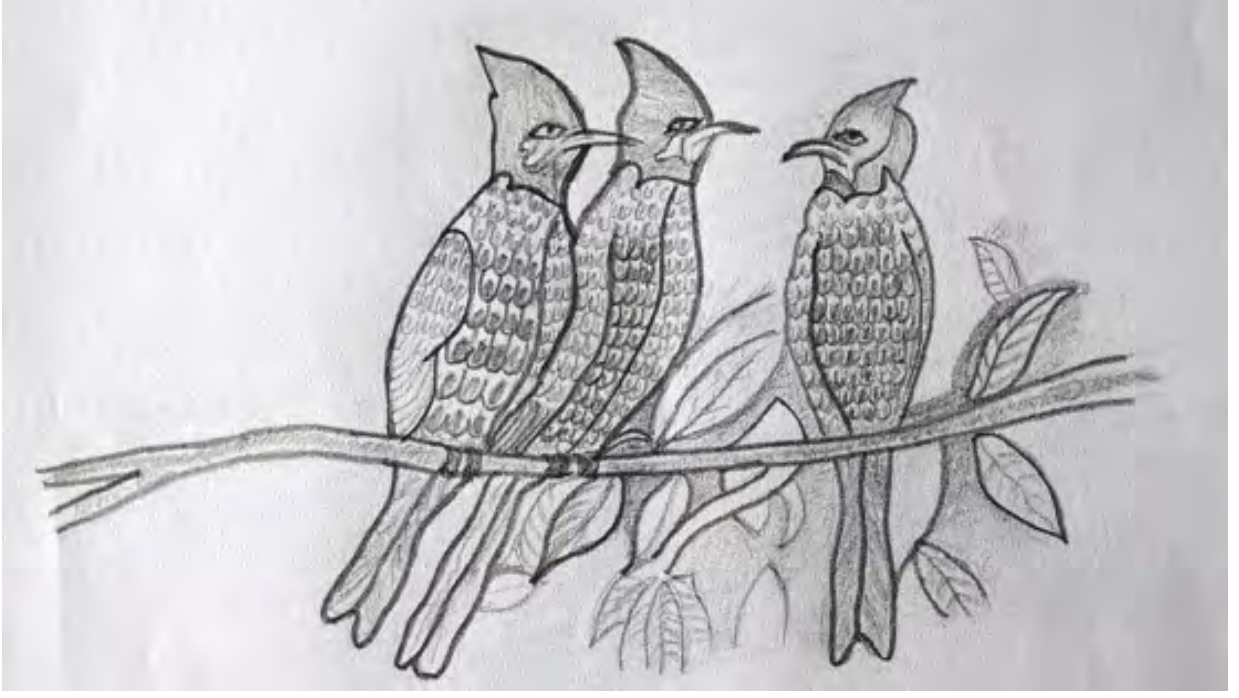
Why are you running this when you know this aren't your race? Better give your-self a chance or else, one fine day, when you know it's too late and you're too weak, a wonderful reminiscent song plays by in your outdated radio which, you prefer over your grandsons I pod…strikes a deep chord in you and without your knowledge helps itself vent out the silent tear which, from years, wanted to roll of your eyes. And, that moment my friend, would fill you with the worse remorse and would stand to be the greatest failure of your entire lifetime.

Your entire term of service to your job or the money you make outtake it can never be equal to your wife's dedication to your marriage and home or the smile on your daughters face, when you have dinner along with her and ask about her school...what I am trying to provoke in you is, in this tremendously pacing life, you're failing to acknowledge the happiness around you. Home is your ultimate destination. So never ever skip home for something else which could get you a fortune, because when you return, you never know, there could be no home.

Your earning makes you blind. It incriminates you and makes you fail to see what your true potential is. No matter how high be the pay. Why are you chasing money, success and time when you know they come only when they are des-tined to? Why don't you make money doing what you'd always wanted to do? This place is the land of opportunities and yet you're failing?? Listen to what your heart has to say, listen to this wonderfully embedded person in you .Procrastination is only going to make it worse. You're living this day only once. Start it this moment, don't bother to think. Just start…you're going to make it big even if you keep falling now…but if you keep crawling, afraid of falling down if you walk, you're never going to have the world under your feet. So stay young in the heart, keep it wild and remember to live this moment to the fullest. Because, life is too short to be filled with regrets.

- Harshan Parthiban, 15BCS058, II CSE A

Art work and Poetry

Indhu priya, III CSE

கடல்

நீள ஆடையை அணிந்திருக்கும் ஓர் அழகே!

நீ அழுதால் அழிந்து போகும் இவ்வுலகே!

உன்னைப் பார்த்தால் என் மனம் அடையும் உவகை நிலை!

நீ மாந்தர்களுக்கு தருகிறாய் அளவில்லாமல்!

உன்னை கலங்கப்படுத்துகிறோம் நாங்கள் மதியில்லாமல்!

உன் உடைகள் அமைந்திருக்கும் புதுப்புதுத் தோற்றங்களாய்!

நீ கோபத்தை காட்டுவாய் அலைச்சீற்றங்களாய்!

உன்னைக் குளிர வைத்தால் நாங்கள் மிதப்போம் இன்பத்திலே!

உன்னைக் கலங்க வைத்தால் நாங்கள் மிதப்போம் துயரத்திலே!

-இந்து பிரியா, III CSE

Virtual reality is the first step in a grand adventure into the land-scape of the imagination.

--FRANK BIOCCA

Virtual reality was once the dream of science fiction. But the internet was also once a dream, and so were computers and smartphones.

--MARK ZUCKERBERG